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Book

Faith and modern thought

FAITH
AND
MODERN THOUGHT.

FAITH
AND
MODERN THOUGHT

BY
RANSOM B. WELCH, D.D., LL.D.

PROFESSOR IN UNION COLLEGE.

WITH INTRODUCTION
BY
TAYLER LEWIS, LL.D.



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DEDICATION.



IN HARMONY WITH THE AUTHOR'S DESIGN TO SEEK AND
SERVE THE TRUTH, HE HEARTILY DEDICATES THIS
VOLUME TO THE MANY STUDENTS WHO
HAVE ACCEPTED HIS GUIDANCE IN
THE SAME SEARCH AND
SERVICE.

P R E F A C E .

THE occasion of this little volume may be found in the spirit of modern discussion.

The title—Faith and Modern Thought—was chosen by the writer long before he knew that a similar subject—Christianity and Modern Thought—had been proposed for a course of lectures in Boston, during the winter of 1875-6.

The material is composed, in part, of essays prepared for special occasions, and subsequently published in Quarterly Reviews.

If, in defence of certain positions, plain words have been employed, they are in reply to plain words employed in attack.

If it be questioned whether the spirit of the book is in too close sympathy with the spirit of the time, the author has no reply to make; if it be asserted, he has no apology to offer.

Earnest inquiry everywhere prevails. Old theories are scrutinized; new theories are criticised.

By the best and safest thinkers, the new is not discarded because of its novelty, nor the old because of its antiquity. By the common consent of all whose judgment is worthy of consideration, truth is no less desirable for having never been refuted ; nor is error more desirable for having never been vindicated.

Now, as ever, the paramount inquiry should be for the true, the beautiful, the good. Spurious theories invented for special purposes should share the same fate, be they modern theories or ancient. The laws of thought have not changed, nor have the principles of taste, nor the sanctions of reason and conscience. Modern complaining can not annul or transform the past ; modern contriving can not create or preform the future. Mere philistinism can effect nothing in either direction. Candid criticism alone can avail us. As great questions like evolution, and correlation, and descent, are not to be dismissed with prejudgment or without examination ; so, essential doctrines of religion are not to be condemned and abandoned because they seem to be disturbed by innovation.

Manly fairness and patient courage are demanded. It is not yet clear how far Science has advanced toward the solution of its own problems ; nor how such solution, if reached, would affect the more re-

mote questions of life, and thought, and being,—in a word, the ultimate principles of origin, and order, and design, and consummation.

At last, as at the first, these questions meet us: What are the laws of thought? What are the principles of faith? Where can Science find a resting-place? Where can religion find repose? Toward this goal we are to direct impartial inquiry.



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INTRODUCTORY NOTICE.

DR. WELCH is a very calm writer; he is also remarkably clear. Both of these qualities of style are characteristic of strength. Without pretentiousness, or anything like polemical display, they indicate the confidence of strong conviction and of thorough insight. The questions presented are fairly as well as ably treated. The reader will find here no underrating the strength, or the positions, of those with whom the author is contending. There is no declamation about the extinction of the purest hopes, and of the most elevated motives of human conduct, that must be the result of the universal prevalence of a soulless materialism. The authors and defenders of such a hopeless view of the human origin and destiny are supposed to know all that. There is a keen sarcasm in some parts of this book, but no trifling witticism, as though the opinions of Spencer and Tyndall could be refuted by a jest or a ludicrous illustration. There is no

appeal to prejudice, literary or religious, no use of the *argumentum ad verecundiam*, no attempt to arouse, either the popular feeling, or the theological odium, against the scientist as one who degrades the human dignity by maintaining our kinship with the ape or the kangaroo. The subject is too grave a one for such treatment. Dr. Welch is too grave a writer thus to handle it. He reveres his Bible, too, and he knows in what language the Scriptures describe the lowliness of man's physical origin, his first condition as "of the earth earthy," representing it as allied to all below, comparing him to "the worm," to "corruption," to "earth and ashes," or to sum up all, solemnly announcing that as he was made from the dust of the earth, so unto dust should he, again, because of sin, return.

It is not for maintaining man's *natural* that the author contends with Darwin and Tyndall, but for denying his *supernatural*. It is not because they make him a physical product, or from the earth, as the Scripture does—from "the lowest earth," the lowest nature, *de profundissimis naturæ*—but because they deny the divine inspiration, the sealing image which first made the *species* homo, the true creating Word which pronounced him finished man, a "new thing" upon the earth which before was not. It is not because they treat him as a physical

being, a "natural man," *Ψυχικὸς ἄνθρωπος*, *animalis homo*, as the Apostle styles him, in his fallen state, but because they deny *the spiritual*, τὸ πνευματικόν, which he originally had, and that restoring grace which revives him again, and makes him a "new man" after his terrible lapse into nature and animality. In short, the great strength of this book is in its higher psychology, its view of man's spiritual and of its divine origin, as not only overruling the low conclusions of the physicist, but as confirming the glory of this divine human, this redeemed human, by the closest comparison with those alleged scientific statements that would make man *nothing but dust*, nothing but nature.

It is not formally laid down anywhere in Dr. Welch's book, but it is, nevertheless, a thought suggested in every chapter, and in almost every argument: Only let our Psychology be high enough, and we need never be afraid of naturalism. Let our view of the human spirit only be in accordance with the teachings of the Scriptures, and the noblest human philosophy; let it take into account the greatness of man's rational and moral being, his insight of eternal and *necessary* truth as reflected from the infinite on the finite mind,—in a word, his reason, *comprehending* not merely the halting sense-induction of a *first cause*, but the *a priori* necessity

of an eternal personal mind, the ground and source of all truth, of all rationality, making as certain as that proposition, *cogito ergo sum*, the belief in a higher mind, a higher thought, as the most *necessary* of all truths (if there be any truths to which the laws of our thinking compel us to give that name)—let us hold fast to this—let us study our own souls, look into our own souls, until we see it there, and we need have no fears of nebular principia, or evolution, or development, or any of the bugbear names by which a certain class of scientists may assail our faith. “As Jehovah liveth and as thy soul liveth.” This sublime Hebrew oath contains all that we need. “He that formed the eye, shall He not see? He that giveth man knowledge, shall *He* not *know*? Shall He not know *us*? We may give it any name; call it God or Nature as we please, but personality as well as intelligence, a near personality, the infinitely *near*, as well as the infinitely far, and the infinitely great, are inseparable from the idea, as the idea is inseparable from the *necessities* of our own thinking, finite though it be. “*Mens, ratio, in nobis, non in cælo?*” * Mind, reason, in us, and not in any sphere above? The exclamation of Cicero comes as much from the *a priori* reason itself as the enthymeme of Descartes.

* Cicero, De Legibus. Lib. II., 16.

We have expressed this in our own way, and, perhaps, very imperfectly, but it gives us the spirit and the substance of Dr. Welch's strong reasoning, not as confined to one chapter, but as pervading the whole book. God and soul present themselves as directly to the reason, or to faith, which is reason in its highest or divinely quickened exercise, as nature mirrors itself in the eye of sense. "The *elenchos*, the conviction of the things unseen," whether we call it reason or faith, is to be received with as much confidence, to say the least, as the piece-meal revelations of "the things seen," of which we only know in part (*ἐκ μέρους*) as the Apostle says,—and oh, how small a part, how infinitesimal a part, as compared with the great whole, without a knowledge of which our inductions, even according to Bacon himself, must ever be unsafe,—as far short of certainty, in fact, as the knowledge of a single leaf falls short of enabling us to decide, by sense alone, in respect to the extent, or design, of an Amazonian forest. There is a real sense in which it may be said that faith is essential to a true discernment, even of "the things seen," if we would contemplate them in their *substantial* relations, as something more than dead sequences, the only view which this positive sense-philosophy can take of them without trespassing on domains of thought which it con-

temptuously disowns as forming any part of science, or as, in fact, having any reality. Shutting out everything else but the antecedence and consequence of facts, without any other causal binding, they make nature and the world a phantasmagoria, a fleeting series of unconnected phenomena. It might have been anything else; it might have had any other sequences; it may go on; it may suddenly and universally disappear. There is no reason in it, as there is no real nexus of causation. The moment we seek this we are departing from sense; we are in the region of the unseen, or, to give the substance of Dr. Welch's varied argument, we are in the province of faith. He means by this not simply religious faith, in the more common acceptation of the word. The drift of his reasoning is to show that, in the end, this doctrine of bare sequences, with its claim to be the only real and positive knowledge, is the annihilation of science as well as of theology.

Another aspect of the matter shows the same result. In the extreme nominalism to which it conducts us, not only are there no universals, as the elder thinkers of this school maintained (while they admitted the existence of individual things capable of being classified by *specific* differences), but even *individual* things themselves disappear. They have

no true individuality, nothing which makes a *thing* to be a *thing* with a generic character, separating it from all other things. The atoms are the only realities. There is no fixed being beside them. All the classifications on which science has heretofore built up herself are flowing quantities. They are ever losing specific character, or that which makes each thing, man included, to be what it *IS*, a something more than a changing mass of atoms, having no more of true being, of true individuality, to say nothing of personality, than the ever-shifting sand heaps of the Sahara. Nothing remains the same for two consecutive moments, however swift, or however slow, to our keener or duller sense-perception, the rate of movement, or rate of time, through which the change is disclosed. Nothing stands, as some of the old philosophers said. Give it time enough, and everything will become in the future,—as it has repeatedly become in the long past, and as it is now tending to become,—everything else.

In those three chapters, having the word for their special heading, faith would seem to be used by Dr. Welch as almost synonymous with reason; and yet it is not, by any means, out of harmony with the Christian Scriptures. The applications, too, to scientific reasoning seem warranted by the

Apostle's wide definition of faith as "the elenchos or conviction of the things unseen," (Heb. xi, 1) and his making it (Heb. xi, 3) the ground of our "understanding" (our spiritual discerning) that the worlds were organized (*κατηρτίσθαι*, *brought out in order, evolved*, if any prefer the term), by the Word of God, so that the things which are *seen* were not made (or had their being, *γεγονέναι*) from things that *do appear*, *ἐκ φαινομένων*. In other words, the world of *sense* came from "the things unseen," which are the objects of *faith*, whether philosophical or religious—or *visibilia ex invisibilibus*, as the Vulgate and Syriac have it. So when Paul says, 2 Cor. iv. 18, "The things that are seen are temporal," (*πρόσκαιρα*) belonging to time, "the things unseen are eternal," he certainly could not have meant things now hidden from sight, and to be shown *to sense* in some future existence, but rather the supersensual world of truth and true being. Sight is representative here of all sentiency, and Paul seems to use the contrasted terms "seen" and "unseen," very much as Plato uses his *ὄρατὰ* and *αἰσθητὰ* as contrasted with the *αἰδιῶ* and the *νοητά*, though, on the part of the Apostle, with a far higher and holier aim. There is no improbability in the supposition that he may have heard this, and similar language, in the schools of Tarsus, before employing it in this grand application to the things neces-

sary and eternal, whether as contemplated from the philosophical or the Christian standpoint.

Dr. Welch's broad view of faith as given in chapters II, III, and IV, no more than the definition of the Apostle himself, excludes the peculiar saving faith in Christ, and in his sacrifice upon the cross, which is the ground of the Christian's hope of salvation. But the province of faith as the divinely quickened reason, or "spirit in man," extends to all the unseen world. It is that which, in its spiritual essence, characterized the Old Testament saint, as well as the new: the "enduring as seeing Him who is invisible." In no irreverent way may we also affirm, that it is the ground of the purest insight in philosophy and science, as well as in religion. Without the cognition of the sphere of "the unseen things," lying above sense, and above the science that acknowledges nothing deeper than sense, the universe is but a shadow, with motion, force, and matter, as its only realities.

As suggestive of the train of thought on which we have been dwelling, and of similar related ideas, reference might be made to other portions of this book, and especially to chapter VI, entitled "Modern Thought." We can only touch briefly on some leading points: Reality demands two things. These are "a substance underlying the phenomenon," and

“something to cognize the impression or sensation” which it makes. The *appearance* is simply evidence of something “unseen” that may be said to *appear through it*. Thus the phenomenal world lies between the unseen substantial, and soul as such cognizing power. Both are essential to all phenomenal *existence*. “Modern thought” tends to regard the middle or intervening sphere as the only reality, and as furnishing the only field of science. Very clear and able is the refutation given of this fundamental falsehood, and of the various forms in which it is presented. To notice them specially would interfere with the design of an introductory notice, and with the limits of the space to which it is necessarily confined. We can only refer, therefore, to the manner in which the author meets the declarations of Spencer respecting “force as the ground of all phenomena,” and his dictum that force itself is unknowable. According to Spencer, thought can go no farther. No other cause can be known; no other cause, therefore, can be assigned. This he would strangely propose as a sort of “reconciliation” between science and religion; if he can be regarded as really in earnest, and not satirical, in presenting such a view of the problem. In an animated passage, the author asks: “Is science, whose very office it is to know—is science satisfied with this

proposed reconciliation," thus terminating in a confession of utter ignorance in respect to "the ground of all phenomena?" "Can it consent to a postulate which is suicidal,—an ultimate which would swallow up every scientific labor and success in fathomless nescience." "Can religion accept this theory," is a question which he next presents, and presses still more earnestly. But we are here principally concerned with it as showing why Spencer's "force," or "first ground of all phenomena," is to him unknowable. It is simply because he will not acknowledge the decision of consciousness that *force* is knowable only through *spirit* as an idea, that, in the order of our thinking, must go before. Force is antagonism, resistance, or it is nothing. Without such idea of resistance it is inconceivable; and equally unthinkable, again, is this idea of resistance without that of will as belonging to a conscious sentiency. In other words, without it force can never *appear*. If there were no conception of a conscious sentiency in the universe, as an antecedent ground in our thinking, force could not be distinguished from motion, even though the latter be conceded as thinkable without a farther causal ground ultimately implying mind and will. But in the total absence of such consciousness, force, both as phenomenon and as idea, is gone. Even the sense of sight implies

resistance, though in an infinitesimal degree, perhaps, compared with touch, or sound. But could we indulge the supposition of an entirely antitactic beholding, we might boldly say that *force*, to it, would disappear, and a phenomenon of *change* alone remain. The explosion of a dynamite magazine would give only the thought of scattered motions. Nay more, solidity or hardness would be inconceivable, unthinkable. The granite, and the most yielding fluid, would be alike incapable of giving the idea of resistance, of *effort*, of power in any form. The mightiest collisions would, in this respect, be like the whirling dust, or the spray of the ocean. In the absence of mind, force, as we now conceive it, *as we are now compelled to think it*, would vanish from the universe. It would have no mode of manifestation. It would present no test of what we call reality. This inherent connection between the dynamical and the spiritual idea has also been ably set forth by Dr. Martin, of the New York University. As the argument is used here by the author, in opposition to Spencer, it is unanswerable. This doctrine of force as the sole "ground of all phenomena" may be called the key position of the anti-religious scientist. To turn it, as we think both of these writers have done, is, in fact, to enter the citadel.

But what right, it may be asked, has one who does not claim to be a scientific man, or to have made any one branch of science his special study, to enter upon such discussions? It is no small merit in Dr. Welch's book that it exposes the arrogant falsehood on which an exclusion of this kind is grounded. A man of liberal culture, with a knowledge of science such as belongs to general liberal education, (without that special devotion to any one branch that makes what we call a scientist) may be amply qualified to detect false logic, even in what is styled scientific reasoning. Much more may he do this when those whom he opposes step far out of their own proper province, and, in the name of science, invade other departments of thought and knowledge, higher than their own, more important in their aims, and more deeply grounded in the universal human consciousness. "He that is spiritual judgeth all, whilst he himself is judged of no one:" It may seem like an arrogant and almost profane accommodation of a most pregnant passage of Holy Writ; but it suggests, nevertheless, an idea having a close application to our subject. The demands of thought transcending the physical must determine the bounds of the physical, and of physical knowledge; whilst this hyperphysical region itself can have no limitations set to it by any thing

below. Some of these specialties of science may actually narrow the thinking range of those most devoted to them, preventing the just appreciation of what lies beyond them, and over them, or making the occupants of these limited departments the least free in their judgments of what is elsewhere thought and known.

It is to this cause we may trace some of those extremely deficient and one-sided views with which the scientific boasting, so common with a certain class of lecturers, has infected even our literary world. A few examples of this may suffice. There is, in the first place, that unceasing talk about "law." Empty reiterations are producing the impression upon such as have no time to think, that, until quite lately, this idea of "physical law," and its regularity had been a stranger to the human mind. No less a writer than Dr. Draper has the hardihood to represent theologians, and religionists generally, as believers in perpetual miracle. Such a view is constantly put forth in defiance of the fact, that, in the very earliest Scripture, (Gen. viii, 22) there is the most solemn declaration of the *constancy* of nature, and a most solemn guaranty given of it for our belief, stronger than any ever furnished by any inductive or experimental science. This claim for "modern thought" is, moreover, in defiance of what an ordinary scholarship

would be sufficient to prove, namely, that the unity and harmony of the *cosmos*—whence the very name—was an idea inseparable from that of law, and that it belonged, not only to the oldest forms of philosophy, but to the current thinking, as manifest in the current speech of the race. There is no position of the lecturing scientist more calculated to move indignation for its shallow untruthfulness than this foolish claim, that the idea of “the reign of law” is wholly due to modern discovery and to modern thought.

Take another example. It may be safely maintained, that along with the universal belief in genera and species, out of which physical science itself has been evolved, thoughtful observation long ago detected apparent deviations, apparent comminglings of kinds, apparent hybrid varieties, prevailing to a limited extent, showing either defect in our classifications, or some permitted diversity in nature, though always ultimately checked by the great controlling law revealed in the first chapter of Genesis. But this is now treated as though it had been wholly a new discovery. From a few observations of this kind in respect to “pigeons” and “pitcher plants,” there is made a sweeping generalization, and that opposed to all previous generalization, and carried even to the denial of all essential species, or of anything like fixed being in the universe.

Again,—the influence of the body upon the soul is another of these oldest, and most universal, of human beliefs. It has been the theme of the poet and the moralist, as well as of the physicist. The Bible most plainly declares it, and the theologian has ever found in it a practical lesson of pious interest. But it is now presented as an entirely new idea ; men had not thought of it, says one ; the erring preacher had wholly overlooked it in his spiritual exhortations. Science has changed all this. It has not only taught us what poor creatures we are—the Bible had abounded in that lesson—but has used this very new discovery as the foundation of the grossest materialism, making us all matter, all body, and wholly extinguishing soul.

Another “phase” of this “modern thought” we find in the continual treatment of pure hypothesis as though it were “established science.” This chorus, too, a portion of the literary and editorial world has taken up, as though, from its continual repetition, there could be no kind of doubt about it. It is all “established science ;” they have no time to inquire ; but so the savans talk, and even if not yet quite proved, it cannot be far from it. Especially does this “phase” show itself in what is so confidently said about atoms. These are treated as though their existence, as an undeniable reality *in*

rerum natura, had been at last positively settled. Our periodicals occasionally present some curious illustrations of this haste to believe in anything that calls itself science. Lucretius, for example, is praised for his wonderful forecasting "genius in having *anticipated* one of the most brilliant of modern discoveries." The reference is to what he says about atoms, as though it were any more, or any less, hypothetical in the brilliant Latin poet, than as it now appears even in some of our scientific text books. The hypothesis of Dalton, and of our latest scientists, may have more of what may be called a scientific look; but atoms are still a sheer imagination. No eye has ever seen an atom; no microscope has ever brought one into visibility. They belong to the "unseen world," not of spirit but of sense. They lie as far below all sense vision, with its highest instrumental aids, as they did in the old days of Democritus. Lucretius had a most ingenious mode of getting the atoms at work, in his hypothesis of an infinitesimal deviation from the perpendicular, or the original direction of their motion. This would be enough, in time, to set them all impinging, and therefore, in a still longer time, of running through all possible collisions and cohesions until they had produced this present "aspectable world," as he styles it. It had as much "established science"

in it as any modern hypothesis built on similar premises. So was it with the older atomism of Democritus. Given an eternity to work in, what would they not accomplish? Infinite incongruities falling at last into congruities; or after infinite misses making, at last, some lucky hits, so as to get in some kind of position, and so on, and so on, until, after another immeasurable time, some kind of embryo world would begin to appear. Tremendous leaps did these old world-builders make, but not more tremendous than are now made by the modern cosmologists. The maxim of these older men seems to have been ἀρχὴ ἡμῶν ἔργου, “the beginning is the half of the work.” Get the atoms in motion, get them “deviating from the perpendicular,” let them begin to impinge upon one another, making their congruities and their natural selections, and the business might be regarded as virtually done. The world,—with all its freight of life organic, vegetable, animal, with all its load of sin and death and corruption, with all its forces, with all its mind and consciousness, would come at last, as it would all, in like manner, at last disappear. Only give it time enough, and, in a similar process, all things would come out of the nebula, that favorite hypothesis of modern times. We are not exaggerating the features of resemblance. Any one who will turn to Aristotle’s *Physica*, Lib. III,

Chap. viii., * will see how old is the doctrine of "natural selections," and "survival of the fittest," out of which Darwin would make all species.

The unscientific mind, it is said, is not competent to deal with these matters. The objection involves an egregious fallacy. It is a fact, and the scientific men who make this plea should be plainly told it, and made to confess it, that there is a region accessible to the common cultivated mind, and especially to such a thinker as the author of this book, where the Darwins, Tyndalls, and Huxleys—giving them all due credit for the great eminence they have attained, and the great value of their science, so far as they have established it—are simply on a par with other men of intelligence. By the thoughtful man this science-transcending region is soon reached. A few steps, and we are where the great philosophers of old, and the great schoolmen of later times, (defective as may have been their science) showed an acuteness in discussing these questions of primordial

* The passage is quoted and well translated by Mivart in his book on the Genesis of Species, page 306. It is thus Aristotle states the opinion of the old atheists whom he refutes: "For when the very same combinations happened to be produced which the law of final causes would have called into being, those which proved to be advantageous to the organism were *preserved*, while those that were not so, perished like the minotaurs and sphinxes of Empedocles."

The illustrations are crude, but there is as much "established science" in the ancient as in the modern Darwinism.

causation, and a power of thought, of which the keenest thinkers of this or any other age might well be proud. Inductive science, the highest range of sense-knowledge, gives no advantage here, except as all culture quickens the mental powers, and extends the sphere of philosophic insight. It is not presumptuous, therefore, in men like Dr. Welch to enter upon discussions like these, and the same might be said of Professor Martin, Mr. Bowne, and others in our own land who have boldly analyzed the boastful pretensions of what calls itself "modern thought."

We are tempted to say more of this little book, but the Introduction ought to bear a due proportion to the modest volume it announces to the public. Our thanks are due to the publishing house of Putnam's Sons for the service they have rendered to the cause of religion and revelation by adding this to the valuable course of similar healthful works they have lately given to the world.

TAYLER LEWIS.

SCHENECTADY, February 3, 1876.

FAITH AND MODERN THOUGHT.

CHAPTER I.

THE MODERN THEORY OF FORCES.

THE theory of force is as old as the process of speculation. But the theory of forces as applied to the great questions of physics and philosophy is of modern origin.

Let us examine this modern theory : first, in the light of its own definitions, its consequences, and its confessions ; and, secondly, in the light of consciousness, reason, and revelation.

This theory proposes not only to explain the phenomena of nature, but to solve the problem of being—to tell what is, and how it is—what is primitive and what derivative—where the process of derivation began, and how ; and how it proceeds, including within its range, not only matter and mind, but problems of life, and liberty, and morality, and religion.

Wide as is this range, it is to be penetrated everywhere by the light of science, which is to guide the explorer in every direction to the desired solution. In this bold venture science claims to be positive, and to rest solely on demonstration.

The canon proclaimed as regulative, at least theoretically regulative, is: "In positive science nothing can be assumed."

How this canon is observed, and this claim is maintained by the modern theory of forces, will the better appear as we advance.

Observation and experiment have ascertained the convertibility of light, heat, electricity, magnetism, chemical affinity, etc. Hence has been deduced the principle of correlation of forces. And, as these forces are only transmuted, not destroyed, by this correlation, another principle has been deduced—the conservation of energy, or the indestructibility of force. Indestructibility relates to the quantity of force; convertibility relates to the quality of force.

For ourselves, we are ready to admit that there is a theory of forces which is both ultimate and unquestionable—that there is an equivalence and a correlation of forces which the world has been only too slow to recognize—that the conservation of force is a principle which science may well maintain—that the persistence of force, if properly explained, must

commend itself to universal acceptance, and that the doctrine of evolution, if relieved of absurdities, is valid. But this conclusion turns, mainly, upon the conception of forces and the scope of their correlation, and involves the essential question, whether life and mind are forces—a question which runs through the entire discussion.

It will be remembered that Prof. Grove, among the first to introduce the terms correlation and conservation, speaks of forces as related to matter, and the conservation and correlation of forces as confined within the range of material nature. (See his Lecture, 1842, quoted approvingly by himself in later lectures.)

M. Faraday, who regarded the conservation and correlation of forces as the highest law hitherto discovered in physics, also employed the term force as related to matter, and applied correlation and conservation of forces within the range of material nature.

We are ready not only to accept but to maintain this view of the correlation and conservation of forces as presented by Grove and Faraday, and other earlier advocates of the theory of forces.

But within the last decade the notion of force has been enlarged, and the scope of correlation has been extended far beyond the realm of matter.

Although the general principle is correct, viz. : Conservation and Correlation ; yet, the theory of forces, amplified as it is, and diverse and contradictory as we shall see, shows how immature are many of the notions on this subject, and how easy it is in the enthusiasm of scientific speculation to fall into error in applying the general principle.

Let us examine this theory in the light of its own definitions. While these definitions should be clear they should not be contradictory. They should mark, at once, the precise and permanent limit to the application of the theory. It is preposterous to talk of the correlation of forces without understanding what force is. It is still more preposterous to talk of forces as affections of matter without understanding what matter is—whether force is matter, and whether mind, as some affirm, is the most highly concentrated force.

In the slightest hazard we cannot submit to guidance which does not know its way. *A fortiori*, we cannot submit ourselves to unwitting guidance, when the very nature of matter and mind is involved, when our own origin and destiny, the very origin and destiny of thought and being, are involved.

According to Mr. Grove, force, though so subtle as to elude the senses, is real and casual—the producer or cause of motion ; (passim).

While this definition may apply in dynamics, it is evidently inadequate in statics, as Mr. Grove himself admits, "in the case of equilibrium of two arms of a balance;" and so, we may add, in every case of statics where balanced forces of indefinite degree may produce static repose in any degree.

Dr. Mayer, of Heilbronn, in his paper on "The Forces of Inorganic Nature," p. 251, says: "The term force conveys the idea of something unknown and hypothetical."

On the other hand, he tells us, p. 252, that "forces are indestructible, convertible, imponderable objects."

Dr. Bray, in his *Anthropology*, etc., p. 164, declares with scientific enthusiasm: "Force is everything." And, doubtless to be more explicit, he says on p. 220, "The scientific idea of force is the idea of as pure and mysterious a unity as the one of Parmenides. It is a noumenal integer phenomenally differentiated into the glittering universe of things."

It is a relief to turn from this dazzling definition to the milder utterance of Faraday: "What I mean by the word force is, the cause of a physical action."

As this restricts the effect to the limit of physics, so it would seem to restrict the cause—though the statement is indefinite.

Dr. Bastian, in his labored work on "Force and

Matter," I. p. 4, explains force to be a mode of motion, differing again from all that precede him in regarding force as neither effect nor cause, but as the mode of an effect.

Herbert Spencer, *First Princ.*, p. 266, says: "Force, as we know it, can be regarded only as a certain conditioned effect of the unconditioned cause, as the relative reality, indicating to us an absolute reality by which it is immediately produced." And Prof. Barker, as if deliberately to increase the confusion, says in a lecture devoted to the elucidation of this subject: "By actual energy as contradistinguished from potential energy is meant motion. It is in this latter sense that we shall use the word force in this lecture." (*Correlation of the Vital and Physical Forces*, p. 7.)

This is a sample of the definitions which could be greatly extended. And, yet, under the threat of censure from this school of "more advanced thinkers," as Prof. Barker styles them, we are required to adopt their theory of forces.

From these confused and contradictory definitions of force, we turn to the view of matter as presented by this modern theory. Does it distinguish or identify matter and force?

As we have already seen, Mr. Grove says, "Forces are the affections of matter," thus distin-

guishing between the two; while Faraday declares, "matter is force," thus identifying the two. Faraday reached this decision, as we learn from his "Life and Letters," after the maturer experience of a life spent in scientific observation, pushing his analysis to the ultimate conclusion that the "atoms of matter are centres of force."

Winslow says, p. 70, "Matter is of itself a mere vehicle. Its fundamental nature is to possess and hold force as a bladder holds water; a sack, meal."

Balfour Stewart, in his recent work on "The Conservation of Energy," says, p. 133, "Matter is essentially dynamic."

Bastian, one of the most radical supporters of the modern theory of forces, says "Forces are the qualities of matter"; while Bray, no less radical than Bastian, says "Matter is force."

Professor Spiller (see *Popular Science Monthly*, Jan. 1874, p. 351), asserts that "no material constituent of a body, no atom, is in itself originally endowed with force, but that every such atom is absolutely dead and without any inherent power to act at a distance."

He fundamentally distinguishes matter and force, and goes on to show that force is an entity having an existence substantial and independent of matter.

And among the latest utterances in the same

direction, Prof. Stallo (*P. S. Monthly*, p. 351), condemns both the hypothesis of "corpuscular atoms" as advocated by Spiller and others, and the hypothesis of "centres of force" as advocated by Faraday and others; and to complete the confusion in regard both to force and matter, affirms that there is no force without matter, and no matter without force, but that neither of these elements has any reality as such.

We confess our inadequacy to adopt these contradictory definitions, as well as our growing suspicion of a theory built upon such a foundation.

Like disagreement prevails among this school of scientists in regard to Life.

"What is its origin," Prof. Tiedemann declares, "is beyond the range of experiment." Dr. Bastian declares life to be "the result of molecular combination," and, together with his coterie, vociferously teaches archebiosis—the old theory of Needham and Redi, and older still of Ovid and Lucretius, that "living things can take origin from non-living materials."

While another coterie as vociferously deny archebiosis and teach panspermism—the theory of Spallanzani and Bonnet, etc., that the atmosphere bears with it everywhere the germs of infusorial animalculæ and of other organic forms, from which generation

proceeds, generation apparently but not really spontaneous.

“Life,” says Schelling, “is the tendency to individuation.” Herbert Spencer says, “Life is the continuous adjustment of internal relations to external relations.”

Dr. Meissner, who informs us that he “succeeded in directly producing life in inanimate bodies,” and therefore ought to know, says “Life is but motion.”

We had supposed it neither difficult nor uncommon to transmit motion to inanimate bodies; but this error Dr. Meissner would promptly correct by the oracular announcement, that “motion is an actual tangible substance.”

Prof. Owen says: “Life is a sound expressing the sum of living phenomena.”

Now, we are arrested by the advocacy of epigenesis, with the rallying cry from its supporters: “*Omne vivum ex ovo*,” with an occasional modification: “*Omne vivum ex vivo*.” Anon, the adverse claims of heterogenesis gain the ascendant; and, now, homogenesis increases the confusion. Discord becomes contagious as the scientific coteries concentrate upon their favorite and diverse issues—biosis and archebiosis, spontaneity and heredity, homogenesis and heterogenesis and epigenesis and pangenesi-

Dr. Bastian concluded that he had produced "truly organized plants and small ciliated infusoria," out of inorganic matter. But Schultz and Dalle claimed to correct the hasty conclusion by their failure to vitalize lifeless matter, organic or inorganic.

Dr. Bray declares that life proceeds only from life; while Mr. Crosse, it will be remembered by the readers of "The Vestiges of Creation," by a solution of silex in water, created the late lamented insect, so precocious that it promptly became a shining mark for death, but which during its brief and brilliant life received the name of its fond creator—*Acarus Crossii*—the first, alas, I believe, the only one of his spontaneous offspring.

On the one hand, are arrayed "the advanced thinkers" from Lamarck and Burdach to Bastian and Pouchet.

On the other hand, are arrayed "the advanced thinkers" from Schwann and Schultz to Pasteur and Duthiers.

But this discord is aggravated by the special disagreement of what were deemed friends in the larger strife. Even Pouchet cannot agree with Bastian, nor Burdach with Lamarck.

Pineau in 1845, as he tells us, actually watched, step by step, the heterogenetic origin and development of one microscopic fungus, the penicilium

glaucum, and of two infusoria, a vorticella and a monas lens!!

While the materialistic Büchner says of life: "The final results are separated from the original causes by such a number of intermediate links that their connection is not easily established."

And Bray, one of the most advanced of "the more advanced thinkers," says: "Life, so far as we yet know, proceeds only from life;" and he quotes in confirmation the statement of Prof. Huxley, that "constructive chemistry could do nothing without the influence of pre-existing living protoplasm." (Bray, p. 34.)

But we need not multiply instances of disagreement and contradiction among these modern theorists on life and matter and force.

Vagueness in the general statement allows apparent agreement; and verbal legerdemain serves the double purpose of relieving the initiated, and deceiving the uninitiated.

It is under the cover of such indefiniteness that an illicit process has crept in which would forsooth clandestinely commit us all, and all things, to a vague theory of the correlation and conservation of forces. It is because of this very indefiniteness of terms that so many vagrant and diverse theorizers can be classified as members of this modern school of scientists.

Precision would greatly check the enthusiasm of their support and their mutual admiration. And yet, with a charitable profession that would hide a multitude of faults, and at the same time prevent scrutiny from without and from within, Prof. Youmans industriously heralds the new scientific brotherhood with this announcement: "It is now an axiom that not he who guesses is to be adjudged the true discoverer, but he who demonstrates the new truth."

This confusion would be comparatively harmless and insignificant, like the play at blind man's buff, did it concern only the players. While this theory confined itself to the material field, if not helpful, it was at least harmless. Although it could not agree upon a definition of force, nor of matter, nor of forces—now distinguishing and now identifying that which it had just distinguished, and so plunging itself and those who relied upon it into inextricable confusion; yet the speculative and the practical thinkers remained unaffected—accepting the conclusions of this theory, and disregarding its verbal contradictions—as hitherto, so now, applying forces freely and converting them into each other as occasion demanded.

But overstepping this limit and applying its hypothesis to life and thought, this modern theory of

forces by its rough play of confused definitions and eager generalizations, and scientific dogmatizing, can but work mischief; for, though it cannot tell what force is, nor what is matter, nor what are forces; yet, it declares that vitality and thought, life and mind, are the same as matter—forces the same in kind as physical forces—thus destroying all fundamental distinctions; correlating thought with heat, choice with physical compulsion, and life with the sweep of a lever; correlating, confounding, human morality with material mechanism, freedom with fate, moral government with natural necessity; in a word, making life and mind material, the same in kind as a stock or a stone, imperiling, at once, moral government, human responsibility, and individual freedom.

Such is the scope of the theory logically implied and openly avowed.

That I do not overstate this, a few references will abundantly prove.

Dr. Maudsley in his "Physiology and Pathology of the Mind," styles mind "the highest development of force," where it appears in its most compressed form as consciousness.

Dr. Hammond in his "Physics and Physiology of Spiritualism" says: "Mind is a force, the result of nervous action."

Dr. Bray in his "Manual of Anthropology" says concisely: "Mind is force." In the same category he places heat, light, electricity, chemical affinity, life and mind, as forces known to us only in their modes of motion; and characterizes heat as the most diffuse, and mind as the most condensed form of force. "Therefore mental philosophy becomes a pure system of dynamics or measuring of forces."

Prof. Youmans, after enumerating the forces manifested in the living system,—mechanical, chemical, thermal, luminous, electric, nervous, sensory, emotional, and intellectual, asserts: "That these forces are perfectly coördinated . . . does not admit of doubt." And, kindling with enthusiasm, he exclaims: "This law of force spans all orders of existence, not only governing the motions of planets, but ruling the actions and relations of men." ("Correlation, etc., p. xli.)

Moleschott declares: "Thought is a motion of matter."

Büchner, in his work on "Force and Matter," clamorously avows blank materialism, and proposes to establish the identity of the laws of thought with the mechanical laws of external nature, and concludes with this materialistic quotation: "The senses are the source of all truth and of all error, and the human mind is the product of the change of matter."

Carl Vogt, courageously pressing the modern theory of forces to its logical materialistic limit, asserts that thought is a secretion of the brain, that "just as the liver secretes bile, so the brain secretes thought."

Herbert Spencer says: "Those modes of the unknowable which we call motion, heat, light, chemical affinity, etc., are alike transformable into each other, and into those modes of the unknowable which we distinguish as sensation, emotion, thought; those in their turns being directly and indirectly re-transformable into the original shapes."

Prof. Youmans does not, indeed, claim that this has been proved, only that "it seems abundantly evident." As if willing to set logic at defiance, he argues thus: "If the forces are correlated in organic growth and nutrition, they must be in organic action; and thus human activity in all its forms is brought within the operation of this law"—the correlation of forces. Even the logic of the most modern science must rebuke the rashness of such a defence. Apparently rebuked by his own reflection, he offers this apology: "From the great complexity of the conditions, the same exactness will not, of course, be expected here as in the inorganic field."

We would say—the greatness of the issue in-

volved demands at least equal exactness. We commend to the careful consideration of the professor, his own axiom marked with his own emphasis: "Not he who *guesses* is to be adjudged the true discoverer, but he who *demonstrates* the new truth." —p. xvi.

Prof. Barker supplements the want of demonstration by this appeal: "Can we longer refuse to believe that our thought is in some way correlated to the natural forces? And this," he significantly adds, "and this even in the face of the fact that it has never yet been measured."

Really the refusal does not seem to us difficult; indeed, according to the axiom of popular science announced by the American editor, it seems to us obligatory. Verily, the supporters of the modern theory of forces exhibit remarkable facility of belief in this direction.

Their readiness to adopt the modern theory awakens the suspicion of a zeal not according to knowledge. They may moderate their zeal by reflecting upon the involuntary confession of Prof. Tyndall: "The passage from the physics of the brain to the corresponding facts of consciousness is unthinkable;" or, upon the friendly warning of Dr. Bray: "There is no bridge from physics to meta-

physics—there is no road that way ; the only road is from metaphysics to physics.”

It is not at all surprising that Prof. Barker, in view of the difficulty in his line of advance, should prefer appeal to demonstration. An authority on this point, whom Prof. Barker will neither gainsay nor suspect of unfriendly prejudice, Dr. Bastian, frankly admits that “however probable it may be that what we know as sensation and thought are as truly the direct results of the molecular activity of certain nerve-centres, as mechanical energy is the direct result of a muscle, *this cannot be proved.*” (The Beginnings of Life, I. p. 49.)

While Herbert Spencer, for whose authority Prof. Barker will entertain no less regard, favorably discussing this very question (Principles of Psychology, 1869, p. 194), asserts: “There is no fixed or even approximate quantitative relation between the amount of molecular transformation in the sentient centre and the peripheral disturbance originally causing it. Between the outer force and the inner feeling it excites, there is no such correlation as that which the physicist calls equivalence—nay, the two do not even maintain an unvarying proportion. Equal amounts of the same force arouse different amounts of the same feeling, if the circumstances differ. Only while all the conditions remain constant

is there something like a constant ratio between the physical antecedent and the physical consequent."

At this essential point the case requires, and we demand, a precise statement of the correlation if it exist, and an exact quantitative estimate of the relation assumed by this theory.

On the contrary, we are met by the admissions of Barker, and Bastian, and Bray, and Spencer, and Tyndall, that it is a hopeless attempt to establish anything like a quantitative estimate.

Thus the modern theory of forces breaks down of its own weakness at its very entrance upon this disputed field. Viewed in the light of its own definitions and consequences and confessions, it is inevitably condemned; awaiting greater condemnation, as we shall see, when viewed in the higher light of consciousness and reason and revelation.

It may well be questioned whether this modern theory of forces would ever have received the advocacy of such confessors, were not the theory supposed to be serviceable to another, dear as a nursling to this school of thinkers—a theory of evolution. But it is quite illogical and imprudent to support a fallacy in order to maintain a dependent hypothesis. A fallacy can be serviceable only in maintaining a fiction, like this counterfeit theory of evolution—for there is a theory of evolution that is true.

If, we ask, the modern theory of forces proves so defective and treacherous on the very margin of this disputed territory in estimating the quantitative equivalent of the nervous system, "because the manifestations of this activity are so subtle and eluding," what must be its more disastrous failure when the complication is increased by the addition of other factors no less elusive, such as muscular activity mingling with nervous, and physical nutrition mingling with both, and yet other factors no less elusive and still more subtle,—consciousness and volition and conscience and reason?

From its definitions confused and contradictory, its confessions of inconclusiveness and invalidity, and its inevitable consequences of materialism and fatalism, we pass to consider this theory in reference to life and mind, and examine it in the light of consciousness, reason, and revelation. First, in reference to mind.

In this higher field of observation the subject is psychical, not physical, else it were the same field still, language itself were false, consciousness itself deceptive, and the term correlation meaningless, and all measurement impracticable, for matter cannot measure itself, and all knowledge impossible, for there would be nothing that could know, perhaps nothing that could be known. Who, at least, could

say that there would be anything that could be known? This alternative would prove more disastrous to the supporters of this theory than to admit the existence of mind. In this higher field, then, the subject is psychical, not physical; the agent is spontaneous, not mechanical; hence, no common gauge can here apply its measurement. More than this: in this higher field, this psychical subject, this spontaneous agent, is a rational person, not a material thing—knowing itself and knowing surrounding things, but not known of them; knowing forces, controlling, employing, applying forces, yet not itself a force; capable of thinking, of feeling, of willing, as forces are not; competent to reflect, reason, love, and worship, as forces are not; conscious of freedom and obligation and responsibility, as forces are not; cognizant of justice and injustice, of right and wrong, of merit and demerit, as forces are not. No theory of forces, however modern, can degrade a person, a psychical, spontaneous person, to a force. Conscious of such a nature and such ability, the mind sees, between itself and material things, a distinction which no theory of forces can obliterate—a distinction more indestructible than any force.

Through the mind we learn of matter by tracing material facts, although matter cannot reverse the process and learn of mind. To know matter we

must study the facts; so to know the mind we must study the facts. While the facts of mind are utterly diverse from those of matter, they are, to say the least, no less certain. The knowledge of mind is, at least, as valid as the knowledge of matter. Only by our knowledge of mind can we verify any knowledge of matter. Mental consciousness is the primary essential. In this fact of mind our knowledge begins, and through it absolutely does our knowledge extend; and by this testimony we learn how distinct and different are the fundamental characteristics of mind and matter. Consciousness and thought and choice, which are characteristic of the one, are impossible to the other. Again we ask, what common measurement can be applied to such diverse facts? What common gauge will answer for mind and matter?

But more than this: how can we know ourselves? Only by our own consciousness. And how shall others know us? Not by the appliance of any mechanical measurement, but by studying our manifestations of mind and character in the light of their own consciousness. Our deeds may be entirely deceptive. How, then, does the estimate of their apparent and their real values vary? The very action, which at first the public deemed commendable, may, when understood, appear culpable. Why is this?

Because conscious intention gives real character to human action. "A man may smile and be a villain." On the other hand, a frown may be in sport, like the play of a father with his children, and thus be a sign, not of anger, but of love. The same blow may smite down an enemy, or quicken the merriment of a friend. The same act may be the salutation of a saint, or the kiss of Judas betraying Jesus. And so these words of Solomon have been accepted by the world as a proverb: "Faithful are the wounds of a friend; but the kisses of an enemy are deceitful." Why, again we ask, why this varying estimate and this varying value of human actions? Again we reply, because the conscious intention gives real character to the action. Thus, we understand, through our own consciousness, the apparent paradox, but the real propriety, of the statement so beautifully made by the poet-king of Israel: "Let the righteous smite me; it shall be a kindness."

But no such rule can be applied to the movements of matter. It is utterly impossible even to attach to them any character, either of merit or demerit. The blow from a falling hammer may kill a man, and yet, by universal consent, involve not the least moral character; while that blow, if impelled by malice prepense, becomes murder, and the perpe-

trator is, by universal consent, condemned as guilty of a capital crime.

But more than this: long before the public may have understood his conduct and character, the man himself has understood both, as he, at first and fully, was conscious of his own intention; and long after the public may have rendered its verdict of praise or blame, the man himself has known whether he was rightly judged.

As we study the facts of matter and of mind, further and further do we get from the correlation of material forces with mental action.

But more than this: while no keenness of observation and no mechanical gauge can possibly determine the character of an external process such as the stern, persistent, and painful surgery of Dr. Brown Sequard in the critical case of Mr. Sumner, which seemed intended to kill, but was designed to cure—the man may even misjudge his own physical acts, unless he study his own consciousness and thus know himself.

In St. Vitus' dance how shall others understand, how shall the man himself understand his strange actions, unless he question his own consciousness, and know whether these actions are with or without the consent of his will? whether they are the effect of mental choice or the effect of physical disease? If,

on the one hand, action be known by the testimony of consciousness to be involuntary, and thus adjudged to have no moral significance; so, on the other hand, may inaction, as in the case of paralysis, be known by the testimony of consciousness to be involuntary, and so be adjudged to have no moral significance. Thus, within the range of human actions, the same act may, in the true light of consciousness, have different character and value, and totally different acts may, in the same true light, have the same character and value; while opposite action and inaction may have precisely the same value without any character—as in St. Vitus' dance and in paralysis—or have the same value with a different character, or have different values and different characters. Not only may precisely the same kind of action have an utterly different character and estimate, according to the mental intention, but it may produce an entirely different effect, according to the mental intention which prompted it—now with a friendly intention imparting pleasure, and now with an unfriendly intention imparting pain; thus, in its result, differing both in quality and quantity, according to the mental intention—baffling the calculation of the most watchful mechanical gauge. So, the same word, producing the same material vibrations, will, according to the feeling it represents, awaken

joy or grief, pride or shame, attraction or repulsion, defy and elude the most skillful mechanical measurement. No fixed mechanical gauge, then, can be applied in this higher field ; no material measurement is possible ; *a fortiori*, no quantitative equivalent can be found.

If, then, from the standpoint of experiment, Prof. Barker and Bastian and Bray and Spencer and Tyndall found it "a hopeless attempt to establish anything like a quantitative estimate," from a still higher standpoint, in consciousness itself, we see the attempt is hopeless.

Now, of these factors,—force, matter, mind—which do we know best? We know matter only through force. But are we conscious of force? No; we are conscious of its impressions on us, its attractions and repulsions, gravitation and diremption, solidity and extension, etc., which are the results of force, and of these we are conscious only through the senses.

Are we conscious of thinking and feeling and willing? We are directly conscious of these ; but these are spiritual acts—at least, different phenomena from solidity and extension. If, as Mr. Spencer is compelled to admit, "The utmost possibility for us is an interpretation of the process of things as it presents itself to our limited consciousness" (see Bas-

tian, p. 2), this is especially true when we pass from the realm of things to the realm of persons. It is not through the bodily senses, but through consciousness itself, that we know the mind; and thus our knowledge of mind is at once more direct, more complete, and more trustworthy. This decisive point Mr. Spencer is compelled to concede: "The personality of which each is conscious, and of which the existence is a fact beyond all others the most certain, etc." (*First Prin.* p. 66); and Mr. J. S. Mill (*Introduction to Logic*) is compelled to assert: "Whatever is known to us by consciousness, is known beyond the possibility of question." Now, if consciousness is "the light of all our seeing," both what is within and what is without, it is obvious how much of our knowledge it includes. In this light of consciousness we may learn, each for himself, and better than his neighbor can tell him, what mind is.

And the first answer of consciousness is, that mind is distinguished from matter—the self from the not-self—in which simple judgment two important things are involved: the one, that the mind or self *is*; and the other, that mind is *distinct* from matter.

Again, the answer of consciousness is, that mind is a spontaneous agent, acting without compulsion, and even in spite of compulsion; again, that mind is

a rational agent, capable of knowing itself and of knowing the material universe, capable of recognizing and obeying obligation. But not only does the mind see itself as person, and not thing, possessed of a will in liberty and a rationality to guide that will, and a conscience to respond joyously to the harmony of the will and the reason, or sadly to their discord ; the mind not only sees what it is, but also shows what it is. Superior to material forces, it brings them into a higher unity than of themselves they could ever attain, making them subserve a human organism ; elevates the life-principle to a higher service than mere instinct ; exalts the senses to a nobler office than that of mere sensual gratification ; employs all these, at the behests of its own rationality, to serve and secure a higher and still higher manhood. This is utterly different, both in kind and degree, from what pertains to physical forces. Thus, by the right of its own conscious excellence, it holds dominion, and for the purpose of augmenting that excellence, it puts all physical forces and all life-instincts and all the bodily senses in subjection to this higher unity.

By this twofold process of induction and deduction, from the standpoint of scientific experiment and from that of philosophic observation, we see how "hopeless is the attempt to establish anything

like a quantitative equivalence ;" how hopeless the attempt to establish a correlation between the forces of matter and the activities of mind.

But the direct argument from mind is by no means exhausted. Moral government exists. We recognize its obligation upon ourselves ; we impose the same obligation upon others. It is vindicated by the individual conscience and by the public conscience, and sanctioned by common law, and appealed to in every struggle for freedom, justice, and reform. This recognition, this vindication, this sanction, this appeal, are all confirmed by the individual conscience, making each a law unto himself ; leaving each at liberty within this moral realm, yet holding each responsible, with supreme sanctions of commendation or condemnation, which the human soul cannot escape—a confirmation superior to all skeptical reasoning or theoretical contradiction or scientific adjustment. Nothing of this kind can be said of material forces ; it cannot but be said of mental activities. There can be no correlation between them, either quantitative or qualitative. On the one hand, material forces never become responsible, however much they may be employed by the mental activities ; on the other hand, mental activities never become irresponsible, however much they may employ the material forces. The distinction is

essential and immutable. Correlation here is impossible. And yet, the modern theory of forces contradicts this highest dictate of the soul, and—in spite of the evidence of literature and law, of private and public recognition, of conscience and reason—denies the possibility of moral government and of morality. It places in the same category material forces and intellectual and voluntary action, denying all difference in kind and quality. “All actions,” says Bray, p. 309, “organic or inorganic, mental or material—all actions being equally necessary, *there can be no intrinsic difference* between them.” Merit and demerit, praise and blame, at once perish. Dr. Meissner proposed to show not only that heat is a mode of motion, but that vegetable and animal life, and human will and love and thought, and even God, himself, are but motion!—the one, no less than the other, subject to necessity and destitute of morality!!

Its logic is sound, if its premises are valid. Merit and demerit are not predicable of mere force; and voluntary action is, by this theory, transformed and degraded into mere force. Hence, merit and demerit are not predicable of human action! According to the modern theory of forces, both morality and moral government, therefore, are impossible!!

We would not discard this theory, solely or pri-

marily, because of its consequences ; but, because it is unsound, we discard the theory with its consequences.

But, not to dwell longer upon the argument from mind, we pass to another direct argument,—the argument drawn from life.

After the admission of Bastian, that “the intermediate links in the life-process are not easily established ;” and Virchow’s statement, that “chemistry has not succeeded in forming a blastema (the general formative compound of tissues), nor physics in forming a cell—what does it matter ;” and Spencer’s confession, “The forces which we distinguish as *mental* come within the same generalization (as the nervous). Yet, *there is no alternative but to make the assertion ;*” and Prof. Tiedeman’s declaration, “The origin of organic matter and living bodies is altogether beyond the range of experiment ;” and Bray’s assertion, “The first requisite is life, which, so far as we yet know, proceeds only from life ;” and Huxley’s admission, in his inaugural address before the British Scientific Association, (1871) ; “Looking back through the prodigious vista of the past, I find no record of the commencement of life, and, therefore, I am *devoid of any means* of forming a definite conclusion as to the conditions of its appearance :” after such admissions it is not necessary to linger

long upon the question of life as related to the modern theory of forces, however fully we may choose to consider it for the sake of the discussion. Evidently, the process in nature is to evolve life from life; vegetables from the living seeds (each after its kind); fish from the living spawn; animals from the egg or living germ; and man from the living germ or the egg.

The earth brings forth, not something from nothing, as it would if life—the greater—were evolved from mere physical forces—the less—but what it has received as a living conception, the physical forces (heat, light, electricity, magnetism, chemical affinity) each and all aiding to develop, but not creating, the life.

If spontaneous generation ever be effected by the skill of man through strange and arbitrary combinations, yet, spontaneous generation is not nature's method.

Everywhere through nature's realm, so far as we can trace it, in the present or in the past, life proceeds from life. The scientific rule is scrupulously observed: *Causa æquat effectum*. The vegetable takes lifeless mineral ingredients, and, applying light and heat, transforms these lifeless ingredients into living matter; this is effected, as Bastian himself admits, "under the influence of pre-existing proto-

plasm." (II : p. 77.) Crystals, evidently, as Bastian also admits, are statical aggregates; living organisms are dynamical. Crystals, in forming, emit heat; organisms, in growing, absorb heat. Organic molecules or atoms have mobility; inorganic molecules have immobility. Inorganic bodies are built up from without by accretion; organic bodies grow from within by assimilation. Organic, living bodies have the power of reproduction or self-multiplication; inorganic, lifeless bodies are incapable of self-multiplication or reproduction. In the life-process there is a ceaseless strife between vital affinity and chemical affinity—the former proceeding to build up, the latter to destroy, the organism. The life-process is the triumph of the former, which not only employs other physical forces, but subjects even chemical affinity and gravity to its high purpose. Indeed, Prof. Clark asserts ("Mind and Nature," p. 7), "Organized beings exist in direct opposition to natural chemical affinity." If this be true, we see the less probability that chemical agency, however skillfully employed, can create life, and the greater propriety in Huxley's statement: "Constructive chemistry could do nothing without the influence of pre-existing protoplasm." (Bray, p. 35.)

To careful, and even to careless observation, life ever appears employing forces, superintending and

directing their service, using them as constructive aids to bring it nourishment and to build up for itself a fitting organism, so that every seed shall have its own body, and every plant its own distinct form, and every animal its own characteristics, and every man his own individuality or personality. For its use, life seeks out appropriate forces, separates them from the inappropriate, and subjects them to its service, producing a higher unity by its own mastery, and a greater diversity for its pleasure and profit.

We would not, then, style life a force—not even a vital force—but an activity, or life-power; while mind is not a force—not even a spiritual force—but a spiritual activity, or mental power.

The distinction is by no means illusory or unimportant. It reveals the barrier between matter and life, between matter and mind—a barrier which we have no fear that scientific progress will ever break down or remove, however much some scientists desire to effect this.

There may be vital forces—chemical, like the digestive force of the stomach, which may be imitated in the chemical laboratory; mechanical, like the propulsive force of the heart, following the most precise rules in hydraulics; muscular force, moving the limbs like the mechanical action of a lever; there are these vital forces which, together with physical forces, like

heat and light, the life uses in its activity and power ; forces which are correlated to each other but which the life uses instinctively and directs not as equals, but as servants to accomplish its higher ends.

Prof. Barker labors through successive pages to prove, what we readily admit and assert, that all these physical operations under the supervision of life are in correlation. While he admits, inevitably, that vital force (as he styles the life-power) is different, dominating the physical forces, asserting its superior right, "uniting substances which in inanimate nature ever flee from each other, separating that which is incessantly striving to unite" (p. 4); and, without even pretending to demonstrate, he merely assumes correlation in such contingent phraseology as: "Chemistry doubts not her ability to produce."

. . . "A few years hence will doubtless give us," etc., etc.

Life is a feeling of want or need which goes forth into spontaneous activity and reproduction. Do those who clamor for spontaneous generation (arche-biosis), and pretend to effect it, produce such life? As a power, life is as primitive and independent in its origin, as are the forces in their origin. While it differs from them in kind, it is also their superior in degree ; the life-instinct, whenever and wherever

it appears, directly going forth with original authority to take for its service and assimilate to itself whatever it may select from earth and air and sea and sky. In the simplest processes of the life-power, this authority is manifest in its on-workings, and within this whole range instinct rules. In the higher processes of this same life-power, within the range of sentiency, sense, with instinct, rules; and in the highest processes of this same life-power, within the range of rationality, reason, with sense and instinct, rules. So that within the human sphere, as not within the animal or the vegetable, even sense and instinct are attended by the informing presence of reason.

There is, then, between the physical force and the life-power, a distinction that is fundamental, characterizing the force as mechanical, the power as living; making this the user, that the used; and by the very distinction in kind, ruling out correlation of forces as not applying in terms, nor possible in fact.

This view of life is confirmed rather than confuted even by the explanation of Dr. Carpenter. As Dr. Carpenter is conspicuously put forth by the American editor as the representative of the modern theory of forces in its application to life, we shall be pardoned for referring more freely to his lecture. (See "Correlation of Forces," etc., edited by Prof. Youmans,

pp. 401, 402, 411, 412, 414, 419, 420, 421, 425. See, also, Balfour Stewart's "Conservation of Energy," p. 161. Also, Le Conte, pp. 185-6-8, 197, 201.)

We have presented the negative argument drawn from the admissions and discordant definitions of the advocates of this theory, and the positive arguments drawn from the nature of mind and of life. By this two-fold process of argumentation—direct and indirect—we have shown the invalidity of the modern theory of forces.

It is obvious to remark that the view we have taken accords with sacred Scripture, as might be shown by repeated references from Genesis to Revelation.

As indications of the scriptural doctrine on this subject, we refer to Gen. ii. 7: "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul." Job. xxxiii, 4: "The spirit of God hath made me, and the breath of the Almighty hath given me life;" and the significant question of Jesus, Matt. vi. 25: "Is not the life more than meat, and the body than raiment?" and his sublime prophecy, John v. 28, 29: "The hour is coming in the which all that are in the graves shall hear his voice, and shall come forth; they that have done good unto the resurrection of life; and they that have done evil, unto the

resurrection of damnation;" the Apostle Paul's sermon at Athens, which not only bears directly upon the origin of life and all things, but seems as pertinent to the vagaries of modern speculation as to those of the Attic type,—Acts xvii. 23–31: "For as I passed by and beheld your devotions, I found an altar with this inscription, TO THE UNKNOWN GOD. Whom therefore ye ignorantly worship, him declare I unto you. God that made the world, and all things therein, seeing that he is Lord of heaven and earth, dwelleth not in temples made with hands; neither is worshipped with men's hands, as though he needed anything; seeing he giveth to all life, and breath, and all things; For in him we live, and move, and have our being; as certain also of your own poets have said, For we are also his offspring. Forasmuch then as we are the offspring of God, we ought not to think that the Godhead is like unto gold, or silver, or stone, graven by art and man's device. And the times of this ignorance God winked at, but now commandeth all men everywhere to repent; because he hath appointed a day, in the which he will judge the world in righteousness, by that man whom he hath ordained; whereof he hath given assurance unto all men, in that he hath raised him from the dead;" and, finally, not to multiply examples, the Saviour's warning to his disciples,

Matt. x. 28: "Fear not them which kill the body, but are not able to kill the soul; but rather fear him which is able to destroy both body and soul in hell."

Here, then, we reach the limit of the specific discussion involved in this chapter; and here we can logically rest. Yet it may be justly expected that we refer to the modern theory of evolution, based, as it is, on the modern theory of forces.

We admit an evolution originated by a divine Creator, guided by a divine intelligence, and governed by a divine purpose, an evolution consistent with the conservation and correlation of forces throughout the material universe. But the modern theory of evolution, based upon the modern theory of forces, discards a divine Creator, a guiding intelligence, a controlling purpose, and assumes a force that is physical, persistent, ultimate, unintelligent, unconscious, unknowable, which evolves itself into all things that are,—matter, life, mind, or, to be specific, into heat, light, electricity, magnetism, chemism, consciousness, reason, volition. Now, it follows from what has been said, that evolution based upon correlation and conservation of forces, as applicable equally to life and mind and physical forces, is untenable. If life and mind are fundamentally and essentially distinct from physical forces, the modern doctrine of evolution is impossible. If life

and mind are not convertible into heat, light, electricity, magnetism, and chemical affinity, and these physical forces convertible into mind and life, then the modern theory of evolution fails.

This theory of evolution is unsound, not only in its foundation, but unsound in itself:

1. It is assumed by its leading advocates, like Mr. Spencer, as the settled and only theory, when it is not demonstrated nor proved. Thus it violates the very principle on which positive science presumes to rest, and invalidates its own process. As an historical fact, this theory of evolution is not proved; as a scientific fact, "an absolute law," without a law-giver, it is not demonstrated. We might safely go farther and say, what is not necessary here to affirm, that in the nature of the case it never can be verified by induction (historic or scientific), never can be demonstrated by positive science.

2. This theory assumes that force, out of which all things are to evolve, is unknowable. Now, by what authority of positive science does it make this assertion? How does it know so much about this force as to warrant the assumption that it is unknowable? Granting, for the sake of the theory, that it may as yet be unknown, does it therefore follow that it is unknowable?

3. It assumes this force to be the ultimate, the

primary or first. But this contradicts the preceding assumption that it is unknowable. If it is unknowable, how can it be known as primary or ultimate? And more, there is no proof that this unknowable force (as Mr. Spencer styles it) is ultimate. Mr. Spencer admits that there is no such proof. Why stop with force as the ultimate? Our consciousness forbids this—*e. g.*, our consciousness declares that in personal experience an exercise of will is before force. More than this, our observation forbids it. When the person dies and the will ceases or is withdrawn from the human frame, personal force ceases.

4. It assumes that this unknowable force is physical—*i. e.*, force without intelligence, or wisdom, or purpose; blind force, acting by chance or by necessity, “whirling and whirling evermore until it becomes self-conscious,” and thinks and reflects.

To say that this force is physical contradicts the assumption that it is unknowable. More than this, experience and observation forbid this fourth assumption—*e. g.*, observation indicates that all force in the material world is wisely ordered, and that all organisms are skillfully adapted: the eye to seeing, the ear to hearing, the generative organs to reproduction; so that long before they are needed, as they form in the womb, it is in exact and complex accordance with the laws of optics and acoustics

and reproduction, precisely adapted to future use in these directions. And these are samples of universal nature. At the same time, our experience declares that force adapted to a purpose is guided by intelligence—a declaration which no logic can confute. More than this, we infer the nature of a cause from the nature of the effect. But for this principle induction itself were invalid, and positive science utterly inconclusive and useless. So here the effects bear the marks of intelligence, of wisdom, of purpose; therefore, the cause must be intelligent and wise, and not mere physical force.

5. This theory of evolution assumes not only that this force is unknowable, yet, at the same time, ultimate and physical, but also that it is unconscious. Again we reply, this contradicts the primary assumption that it is unknowable. If unknowable, how is it known to be unconscious? Thus the contradictions involved in this theory multiply. It contradicts in the sixth place, a fundamental axiom in reasoning, *causa æquat effectum*—an effect can not be greater than its cause. But here is a physical force without intelligence, wisdom, or purpose; an unconscious force evolving (according to this theory of evolution), forces that are living, conscious, intelligent, wise, and moral! Here is the greater constantly evolving from (coming out of) the less—the higher

from the lower! "*Causa æquat effectum*," say these "more advanced thinkers," the effect equals the cause—and with mathematical precision they demonstrate, if a cause (C) produces an effect (E), then $E=C$. So, if E produces another effect (S), then $S=E=C$. Therefore, by the on-working of these causal forces, no degree or equivalence of force is destroyed or annihilated, so that the effect shall become less than the cause, whether to the tenth or ten-thousandth link in the chain of progress. And so we say as earnestly and confidently, *causa æquat effectum*—the cause equals the effect; therefore, by the on-working of these causal forces from the first, no degree or equivalence of force is produced or created, so that in any case the cause shall be less than the effect, whether to the tenth or ten-thousandth link in the chain of regress. This rule evidently works both ways. It is as applicable to the evolution based upon the modern theory of forces, as to conservation and correlation of forces. Nothing else and no more can be evolved than what was at first involved. This axiomatic rule, which Liebig so elaborately, yet so unnecessarily, demonstrates, proves too much for the doctrine of evolution. The simple and homogeneous, which, in the hands of Mr. Spencer and the evolutionists, grows up into such heterogeneity and complexity, must, at the outset, according to

the remorseless axiom, be and contain all the complexity and heterogeneity. Hoist by its own petard, this false evolution disappears, and with it the clearly implied, if not carefully concealed, atheism; and theism appears, indestructible and persistent, and with it involution—for God, as author and finisher, is all and in all—and with this the true evolution, as we shall presently see, for He is before all things, and by Him all things consist.

7. It contradicts its own principle,—that no force is created by the exercise of force. Yet it would, by the mere exercise of force, lift up a lower force to a higher plane than the lower force could of itself attain.

8. This theory is deceptive. It assumes a false name,—evolution; while, by its own showing, it is not evolution, but involution.

9. Positive science boasts of its method of experiment and observation, and claims to rely upon facts. By what process of observation or experiment is it discovered that force is eternally persistent? Does this rest upon fact, or upon assumption? Here again the theory contradicts the method. No possible induction can demonstrate such a conclusion, no fact does or can verify it. Besides, according to the theory, this force is unknowable. How, then, can it be declared persistent? and especially, how can

it be declared eternally persistent? The declared eternal persistence of force inevitably involves the theory in a two-fold contradiction. Perhaps the force which seems so persistent may have had a beginning somewhere in the past; perhaps somewhere in the future it may end. There is nothing in positive science that can or dare deny this.

“Existence,” says Mr. Spencer (*F. Pr.* vol. I., p. 146), “existence means nothing more than persistence.” Existence, then, may have had a beginning—by the self-silencing admission of this theory—so it may have an end. Besides, if persistence is existence, from what, we ask, does this persistent force stand out, or exist—from itself? This is a supplemental contradiction which ranks as an absurdity.

These “advanced thinkers” cannot know, within the limit of their theory, what force is; by what possible right, then, consistent with their theory, can they postulate that force is the cause of all manifestations within us and around us—the ultimate, the persistent cause? Positively none. Their only answer is given in these words of Mr. Spencer: “We cannot go on merging derivative into wider and still wider!”

But, we reply, why not go on? By what right do they stop at this point? Evidently none. Do

they know that they have found the ultimate cause? Certainly not. Do they even know what they have found? Do they know that force is persistent and indestructible? We affirm that they do not know. The very admission of Mr. Spencer is: "Force is an unknown cause, . . . and the persistence of force is a truth which transcends experience." Here, Mr. Spencer, together with his school, abandoning induction, stands no longer on experience or demonstration, but on assumption postulated as an ultimate! His own theory forbids his occupying this position, and condemns it as wholly untenable for these theorists. He does not know the ground he occupies. He does not know whether force—his assumed ultimate—is eternally persistent or not. According to his own admission, he does not know whether force itself may not be self-originated then and there; or whether it be originated by chance, he does not know; or whether it shall abide, he cannot tell!

This physical philosophy leads to interminable difficulties. While it leaves unsolved the profoundest problems of existence, it starts more questions than it settles. Thus the mechanical theory is partial and unsatisfying.

The very assumption that force—physical force—is the basis of being, ultimate and persistent, while

it discloses the unity indicated by science, discloses, also, the insufficiency of force as the assumed first cause; and presses the mind to seek a sufficient cause of force itself and of all things, till some of these more advanced thinkers are compelled to declare, with Bray (p. 168): "All force is mental force, such 'will-power' as we are conscious of exercising in our small individuality;" and with Sir J. F. W. Herschel (p. 224): "The prescience of mind is what solves the difficulty;" and, with Wallace (p. 224): "The inference is, that *force* is produced in the only way we know force to be produced, by the will of conscious beings."

Thus science, whether with willing or unwilling footsteps, is led by its pathway of induction toward an ultimate, persistent, intelligent, and so, sufficient causation. And scientists are doing in the interest of science just what is needed in the interest of religion, to show force and law, unity and multiplicity, pointing back to God.

10. This theory assumes that life and mind are convertible with material forces, thus destroying the fundamental distinction between mind and matter and impeaching consciousness, which declares mind distinct from matter—the one knowing, the other incapable of knowing; the one moral, the other incapable of morality; while mind is an activity which

uses matter, subjecting the material to the service of the mental.

11. It assumes a correlation quantitative between material forces and life and mind, yet admits (see Mr. Spencer and others) that this has not been proved and cannot be—that the task is hopeless.

12. It assumes that, because God cannot be detected by experiment or discovered by scientific methods, therefore, he is not; bowing him out of the universe because he is not indispensable to the hypothesis of positive science, or ruling him out of existence because he does not appear within the range of the telescope.

To this arbitrary rejection of God, it is sufficient to reply, that this modern theory of forces and of evolution is, by its own confession, self-silenced.

It does not know, *a fortiori* it cannot deny. It has not, forsooth, proved that there is a God—certainly it has not proved that there is no God. But more than this, by this virtual and unequivocal rejection of God, this theory virtually and unequivocally commits itself to atheism and chance. There can be no middle ground. It is either theism or atheism—God or chance, the author of the universe. Necessity is only another name for chance, blind as well as capricious!

Here, in addition to all the contradictions already

specified, we find a defect sufficient of itself to condemn the theory as invalid.

IN this emergency, to save the name and the fame of modern evolution, a certain class of advanced thinkers earnestly call upon evolutionists everywhere to adopt archebiosis. It would be remarkably convenient, were it possible, thus to save evolution from breaking down, as it otherwise does, by the absurdity of evolving the greater from the less, and so evolving something from nothing. But archebiosis is only another horn of the dilemma alike fatal to evolution. The process of archebiosis is a process of chance. It is possible, not through order but disorder, the like producing the unlike, the lifeless the living, the inorganic the organic; and archebiosis abandons evolution to the reckless sport of chance.

We said that either process is fatal to evolution. If heterogenesis be accepted, the process is confessedly capricious. It is either a living or a lifeless process, as it may chance, working toward the assumed result; and the result is inevitably capricious, for the effect may be precisely similar to the cause,—life from life; or precisely dissimilar—life from lifelessness. From the same process the result is living or lifeless, as it may chance. If there is any law recognizable, it is lawless caprice, which no sci-

ence can formulate, or even allow. If heterogenesis be rejected, evolution, as proposed by this modern theory of forces, is still by chance; for intelligence and design are deliberately ruled out from the beginning, and the result is an effect greater than the cause, viz. : life and intelligence evolved from a cause which possesses neither—evolved from physical forces, a result possible only by chance. The absurdity is equal, at least, to that involved in heterogenesis, since the effect is not only different in kind from its cause, but different in degree—greater than the cause, so that for evolution, whichever way it fly, is chance; and, in itself, 'tis chance.

Evolution, be it remembered, evolution based upon the modern theory of forces, assumes the task of evolving all things, even life and mind, from physical forces; and by either process, of heterogenesis or homogenesis, is involved in the fatal dilemma of chance, and the result is an inevitable absurdity. Chance can be excluded only by the presence of an intelligent and almighty power, with a wise and free purpose originating and ordering all forces. There is an evolution consistent with such a purpose, and subject to such a power, by whom "we understand the worlds were framed; so that things which are seen were not made of things which do appear" (Heb. xi: 3); so that forces which mold and move

the universe are the expression of his will, *existing* henceforth—*i. e.*, *standing out from God*—as efficient realities in space and time, subtler than the fiery mist or the star-dust, subtler than the attenuated nebula of the modern evolutionist, yet no less real, and more ancient, with causal energy unsurpassed by that assumed in the modern theory of forces.

These divinely created forces, by their interworking and counterworking and onworking, as secondary but efficient causes “make the things which do appear” (*i. e.*, the material phenomena), and mold and move the atoms and the worlds; at the wise behest of their divine Author they constitute these worlds into a universe of order, and, at the same behest, continue the universal order.

Hence, the forces are persistent or indestructible beyond any possibility of finite use or change. Only he who, at his own behest, put them forth into space and time, as local and temporal efficiencies, can reverse or recall them.

Hence, the forces are correlated to each other in their very constitution, and are convertible by finite use or change, as we see continually in the material modifications and in human appliances.

Hence, forces may be multiplied and varied at the divine behest, to build up and adorn and perfect the material universe, and fit it better to become the

abode of living things, as clearly appears to have been done. Upon the primal forces of cohesion and repulsion and revolution, other forces being divinely begotten or superinduced, the world-process advanced until light and heat and electricity and magnetism and chemical affinity all mingled in harmonious efficiency ; and the primeval chaos was gradually transformed to a universe of order and pervaded with light and beauty.

Hence, the forces have evolved not something greater than they involved at first, but what was at first involved—just this in kind and degree ; evolved not as it may chance, but as it should be in the view of eternal wisdom ; evolved not by “ the fortuitous concurrence of mystic atoms ” inert, but by the orderly on-working of efficient forces, controlled evermore by the divine power and guided by a divine purpose.

Thus, in the true view, evolution has a divine origin and a divine purpose ; and the universe is comprehensible and the order of the universe, rational. In the false view, evolution has neither origin nor purpose ; the universe, as a ceaseless series of the conditioned, is incomprehensible, and the order of the universe is mechanical and irrational. The former view culminates in knowledge, comprehensive and satisfying : “ For the invisible things of him

from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead" (Rom. i: 20). The latter view ends in nescience, perplexing and disheartening. Within its distant but darkened range science, material science, pursues its weary way in the tread-mill of experiment amid material forces; seeking for life which can never be phenomenal, but ever and forever evades our physical senses; seeking at nerve-centers to detect and dissect mind itself, which ever and forever eludes the search, replying evermore to the deluded seeker, that while it acts in time it is not confined to space; seeking in every nook and corner of the material universe for the great First Cause, if haply it may feel after him and find him, but with the eye of intuitive reason closed, failing to see him, though he be not far from every one of us; terminating its unsuccessful search in utter nescience and despair. Nothing but perfect demonstration can ever establish such a result or authorize such a conclusion. And in the very nature of the case, demonstration of this negative conclusion is impossible. "All that induction can do, as scientific, is to observe phenomena and sequences in nature, and put them into convenient generalizations."

This modern theory of evolution is not only

unsatisfactory and invalid ; it is wholly uncalled for, and, therefore, even the presumption is against it. We are not, needlessly, to multiply hypotheses. The old dictum of Occam remains valid : *Entia non multiplicanda sunt praeter necessitatem*.

Let Occam's razor be applied to this needless hypothesis of evolution. This presumption is strengthened by the presence and prevalence of an older theory, and a better—an evolution at once comprehensive and satisfactory, comprehending all the facts of material science and satisfying all the spiritual demands of the soul.

The real issue, then, is between the false and the true theory of evolution—between atheism and theism—chance and God. The true view is not only sublime, but is full of sympathy and support and guidance—almighty support and guidance for the material universe—almighty guidance and support and sympathy for man. Whatever changes may occur in material nature—and what finite mind can forecast the possibility?—whatever changes may occur, yet, by the wise behest of Almighty God, order—divine and benign order—shall evermore be preserved ; and man may evermore trust in God and not be afraid ; and, in the light of His divine presence and the strength of His divine aid, go on to

improve and enjoy the life which now is and the life which is to come.

The false view, though but a step removed from the sublime, is—it must be confessed—utterly devoid of sympathy, of support, of guidance and rational government. By it we are plunged into the frightful abyss of nescience. If force be impersonal, what are its powers and possibilities—whether it be mechanical necessity, or capricious chance, or blind fate; whether it be malicious or merciful, as a friend, a fury, a fiend, or a phantasm—is unknown. This were a conclusion horrible enough, were we permitted by this modern theory of evolution to hope in a God behind the unknown force, and superior to it, who might rescue us from the frightful abyss. But to be denied even this hope, and to be left to sink at last in the fathomless vortex of atheism, at the mercy of a blind but tremendous and pitiless force, forever unknown and unknowable—this is the depth of woe, the climax of horror.

And to this we are driven by the modern theory of evolution, based upon the modern theory of forces.

CHAPTER II.

FAITH AND POSITIVISM.

SHALL faith be ruled out? This is not exclusively a question between philosophy and theology, but it is also a question of philosophy with philosophy. It has of late been fashionable in certain quarters to satirize Christian faith as folly, to admit nothing but "positive knowledge," to sneer at belief as irrational.

One class of these pretentious foes to faith, who occupy the realm of sense, assume the modest appellation of philosophers, yet magisterially limit all knowledge to this realm. What appears to sense they know. The phenomenal is the real—the only real. Just what it is, they are not able to say; but that it is, they know. The senses are the media of communication, and the senses are the source of knowledge—the source of all knowledge.

Another class, in the same field of the sense, despising the appearance of modesty, reject the name philosopher; affirm the paradox that "there are more false facts than false theories" (Lewes' Biograph-

ical History of Philosophy, etc.); and resolutely press their theory to its legitimate conclusion, "that a valid philosophy is impossible," "that science is radically opposed to and excludes all philosophy and theology." As said the sophists, so say they, that nothing is truly known; and the logical result is utter skepticism. "The ancient researches," says Lewes, "ended in skepticism, common-sense, and skepticism again. The modern researches ended in idealism, skepticism, common-sense, and skepticism."

The question, then, whether faith is entitled to any place and prerogative, concerns not theology alone, but philosophy as well; even science itself is not unconcerned.

The entire range of this discussion includes two fields: one, the philosophic and finite; the other, the religious and infinite; the former regarding matter, mind, and morals; the latter regarding God, immortality, and religion, especially the Christian religion. After a brief survey of the ground, and a due limitation of terms, we shall follow two lines of argument, the indirect and the direct; by the first to vindicate a place for faith by the admissions (positive or implied,) of objectors themselves; by the second, to establish a place for faith on positive and reliable grounds. The higher domain of faith, the religious and infinite, will then challenge our inspection.

The objectors to faith may be ranged in four classes: The first class object to faith because it can not be verified by sense; the second, because it can not be verified by the understanding. The third class object, that faith transcends reason. The fourth class object, that nothing can be believed, that doubt is universal.

We reply to the fourth objection, that it ends in sheer negation, not only of material substance and phenomena, but of mind and thought itself, even the very thought which gave it birth. The objection is suicidal; it does not allow us to believe that we doubt. To the third objection we reply, that although faith may transcend, it does not contradict reason. But this objection and reply belong especially to the second branch of the subject.

The first and the second classes object, that faith can not be verified by the sense, nor by the understanding. Yet both believe in principles which can not be verified by the sense, nor by the understanding (as we shall show in the proper place); and these very principles underlie the processes, both of the sense and of the understanding, and even the possibility of these processes. "Natural phenomena are ever fundamentally inexplicable by physical science alone." *

* Mivart's "Genesis of Species," p. 287.

This belief, then, of these objectors, which is positive, vindicates a place for faith, even for religious faith, as will appear in the progress of the discussion. We say this belief of the first and the second classes of objectors relies upon reason for its existence, and for the principles which it recognizes. Reason verifies for the sense and for the understanding, in regard to these necessary principles or facts. So may it in regard to things spiritual and infinite. If it be said: Belief does not depend upon reason, but is ultimate and postulatory in reference to the sense and the understanding, we reply, this is only a stronger vindication of a place for faith; for so it may be said, *ad hominem*, in reference to religious faith, it is ultimate and postulatory.

Faith, as a term extensive, is belief founded upon evidence, belief in every direction, toward the sense, the understanding, the conscience, the reason, and revelation, toward the finite, or the infinite, belief whether philosophic or religious. Faith as a term intensive or specific, is Christian faith, including not mere belief, but all else that may be involved in faith. As the former, in its lowest and simplest definition, then, faith is belief founded upon evidence; in the highest and complete definition, it is saving trust in the Redeemer. As an essential in this definition of terms, we have inseparably joined with belief, the

phrase, founded upon evidence, whether the belief be lowest, in reference to mere matter, or highest in reference to spiritual things, even Christian faith. This definition at once and finally excludes from the discussion whatever does not rest upon evidence, be it credulity, superstition, or fancy. Faith evermore waits upon authority. It must have evidence of some sort: sense, or reasoning, or human testimony, or conscience, or reason, or revelation. Faith is not first, but knowledge, of some sort and degree is first. We can not believe concerning that of which we have no possible apprehension, of which we know absolutely nothing. We believe in the existence of an external world, or, at least, of external phenomena; but this belief is based upon the testimony of the senses. Thus founded, our belief may be so complete as to end in certainty. Distrusting the testimony of the senses may lead to the denial of an external world. So in regard to the understanding and its judgments, to the reason and its intuitions, to the conscience and its witness, to revelation and its teachings. In each direction faith relies upon appropriate evidence. There can be no primitive beliefs even, in the sense that they precede all evidence, all authority, all knowledge; or, in the sense that, if not preceding they are independent of these. Such faith would be irrational and blind. If we may entertain such faith

then we may believe what we please, with or without evidence.

Again, in reference to different truths, faith (belief) rests upon different authority: the authority or evidence of sense in reference to phenomena external or internal; the evidence of the understanding in reference to logical reasoning, inductive or deductive; the authority of reason for necessary and universal truths; the authority of conscience with reason for spiritual truths within the compass of finite discovery; and the authority of revelation for spiritual truths which lie beyond. So, different truths reach our belief or faith through different avenues. The truths differ, the avenues differ (sense, understanding, reason, conscience, revelation), the faiths differ, and the results differ. Yet in all, reason with its light as belonging to a rational soul is more or less present, is never wholly absent. Reason, as *locus principiorum*, belongs to the soul, not as pre-existent according to Plato, but by the constitution of the soul, personal, rational. As thus constituted it can not be like a piece of blank paper passively awaiting the inscriptions of experience. Coming into being as a soul in the image of God (or if it be objected as too early in the discussion to make this reference), coming into being as a soul, it has reason, conscience, and a self-determining will, as well as perception.

By the constitution of the soul, no faculty (be it sense or understanding) acts wholly alone. No faculty is ever purely *ἀλογον*, says Aristotle (De Anima, Lib. iIII. 9, 2). Reason gives to sense more than mere phenomena. Reason gives to the understanding more than mere qualities. Without reason, as every one must admit, we should have only an inferior interest in the things of sense ; even an inferior interest in the processes of the understanding. Now, with intense interest we are brought face to face with the great questions: What? How? and Why? with all that they imply. Even the child is not satisfied with knowing what is, but, by the soul's own impulse, asks the cause and the purpose ; and the thoughtful mind eagerly inquires the real meaning of the universe. Reason and conscience, attracted evermore toward a higher unity, long to rest in the all-encompassing, supreme design. Hence not merely physical and intellectual, but rational and spiritual issues move the world. Hence questions concerning faith can not diminish, but must ever increase in interest. Then, as with all other exercises of the soul, reason is present, so reason (this is our point) should go with faith even in its highest exercise. " By the eye of reason through the telescope of faith, i. e. Revelation, we may see what without this telescope we could never have known to exist. But he who blinds

the eye of reason and pretends to see by an eye of faith is not guided by the light, but sees like a man in his sleep" (Jeremy Taylor). "For though reason is not the positive and affirmative measure of our faith, and our faith ought to be larger than our (speculative) reason, yet in all our creed there can be nothing against reason." Pascal sententiously remarks, that "faith is reasonable though not reached by a chain of reasoning." Bedell (*Internal Evidences of Christianity, Philadelphia Lectures*), says: "Christianity requires a faith which is rational, i. e., which is conformed to the laws of our thinking nature; and she submits all the grounds of this faith to the judgment of enlightened human reason." The Apostle enjoins (1 Peter, iii. 15): "Be ready always to give an answer to every man that asketh you a reason of the hope that is in you." A recent evangelical writer, in refuting rationalism (Dr. Fisher, *Boston Lectures*), asserts, that "no amount of evidence can justify belief in propositions that are either self-contradictory or in conflict with known truth," thus guarding faith that it be not irrational, while he maintains that "the human soul has a native recognition, however obscure it may have become through sin, of the verities of natural religion—God, freedom, accountableness, immortality." Says Halyburton (*Inquiry*, p. 356): "Faith must be founded or 'tis

irrational, brutish ;" (p. 357) "Sufficient evidence must always determine our assent ; to resist it is irrational."

We have multiplied statements on this point, not because the reader may require it, nor because the position seems doubtful, but because we would guard against the common but false charge of men like Hume and Gibbon of the last century, that Christian faith is maintained in the absence or in the face of unanswerable arguments ; and of men like Abbott and Herbert Spencer at the present day, that faith is utterly blind and credulous, spurning rational evidence, going against reason as readily as with it ; and for another reason, that some men like Jacobi the German, and Proclus the Greek, have held that "faith is the foundation of our knowledge," that "in belief we have the revelation of all reality—all original cognition," as Algazzali the Arabian, says: "Radix cognitionis fides." Sir William Hamilton ransacks the records of philosophic thought to find authority and precedent to fortify his conclusion "that in the last resort we must, perforce, philosophically admit that belief is the primary condition of reason, and not reason the ultimate ground of belief ; that we are compelled to surrender the proud *intellige ut credas* of Abelard, to content ourselves with the humble *crede ut intelligas*.

of Anselm, by misconstruction, we think, appropriating to his purpose the practical motto of the logical Anselm, and violently pressing even Augustine into the same strange service. While, on the one hand, we should not exaggerate reason to deny all need of revelation, as do the rationalists, neither, on the other hand, should we disparage reason that we may exalt faith. Happily has Dr. McCosh said (*Intuitions of the Mind*): It is good neither for faith nor reason to be alone.

The schoolmen, indeed, like Anselm, styled philosophy the *ancilla*, handmaid, of religion, yet not a foe but a friend of faith, regarding faith with "its root deep in our moral and spiritual nature, as in the highest sense reasonable." In this they but reflected the view of their acknowledged leader, the great Augustine, who, least of all men, shrank from the Apostolic injunction, "Be ready always to give an answer to every man that asketh you a reason of the hope that is in you."

It is easy to see how accumulating errors might spring up as the natural outgrowth from the fundamental error of divorcing reason and faith, as does Kant in his dual hypothesis of the speculative reason and the practical, making the speculative (or pure) reason reject what the practical reason (or faith) accepts, leaving faith to roam the field of morals and

religion not only alone, but blind and unreasoning. Combining this error of Kant with another grave error of the sophists, that "nothing is truly known," Herbert Spencer (*First Principles*, p. 88) unfairly no less than unhesitatingly remands religion to "the sphere of unknown realities," makes faith only "an indefinite consciousness which can not be formulated," and pronounces "the ultimate religious truth of the highest possible certainty" to be this, that "the Power which the universe manifests to us is utterly inscrutable," the religious altar is "to the unknown and unknowable God," and faith in her devotions is blind and irrational.

If, in the spirit of the Rationalist and the Sophist, the statement is made that a proposition may be false to the reasoning faculty yet true to faith, we reply: though false to reasoning, it is true to reason, if true to faith. Against all such disparagements of faith, the view we have already presented is a complete vindication. To recur to our definition: Faith, in every direction, is belief founded upon evidence—at the lowest degree as belief in matters of sense, and in the highest degree as belief in the things of the spirit, even saving trust in the Redeemer.

From this limitation of terms we turn to our first line of argument,—to vindicate a place for faith

by the direct or implied admission of objectors, mindful, within this field of the philosophic and finite, of the maxim that "false metaphysics can be effectually counteracted by true metaphysics alone."

One class of objectors occupy the field of sense, and "positively" limit all knowledge to this field. What appears to sense they know. The phenomenal is the real, the only real. True, the senses are not always uniform in their reports; they may be deceived; they may be impaired; they differ in different persons. The phenomena are fleeting, confused, contradictory. Philosophy, with no guarantee or guide but sense, it would seem, might easily hear the rebuke of its arrogance coming from every quarter of its monopolized domain, and learn a lesson of humility. But whether or not it listen to this rebuke and learn this lesson, it is at least compelled *to trust* in the senses for what it claims to know, and thus all along practically to admit and employ the very principle which theoretically it excludes and scorns.

For example, Mr. Huxley, speaking, (it is to be presumed) according to the rules of "positive philosophy," of the molecular particles of water and of their natural disposition or inherent power to change into steam or into ice, says: "We call these properties of water, and do not hesitate *to believe* that

they result from the properties of the component elements of water." This philosophic statement, as well as the announcement of his unhesitating belief, he makes without the witness of any observed fact or any attempted proof.

But Mr. Huxley, walking by scientific faith, advances to a more commanding position. He believes that originally "living protoplasm was evolved from non-living matter," by natural conditions, and that these conditions may hereafter be artificially produced so that matter will assume the properties we call "vital."

"This opinion," he is careful to say, "is an act of philosophic faith." Supported in another step by philosophic faith, (although he is not careful to specify at every step.) Mr. Huxley advances to the belief that the human soul is produced by molecular matter properly disposed. It does not appear that his guide conducts him much farther in this direction. Indeed it would not seem necessary, since at this point scientific faith reveals to him the identity of matter and mind, or the indifference of both, for Mr. H. is left at liberty to accept or deny either, or deny or accept both. Brought to this position of security and freedom, Prof. Huxley takes time to look about him and prove his devotion to philosophic faith by a demonstration of his iconoclastic zeal.

“The theology of the present age,” he declares, “begins to see the necessity of breaking in pieces the idols built up of books and cobwebs, and of cherishing the noblest and most human of man’s emotions, by worship for the most part of the silent sort at the altar of the Unknown and Unknowable.” Where and how, we would ask, has Mr. Huxley ascertained that there is an Unknown and Unknowable? and how, especially, that he has an altar? and how, that worship is agreeable to him or appropriate to mortals? and how, that the human emotions, which lead to such worship, are the noblest belonging to man? How is it that this class of writers know that the object of this worship is unknowable? Is this “positive knowledge?”

But Prof. Huxley is urged to this by the pressure of science, based upon or embodied in “the fixed order and unchanging causation of nature.” But how has he found that there is a fixed order and unchanging causation? Has his observation comprehended and penetrated all nature? Has the observation of all the explorers in the field of positive science accomplished this? And thus has there been discovered a “fixed order and unchanging causation of nature?” Or is this, again, a matter of philosophic faith? As “organic chemistry, mole-

cular physics and physiology are yet in their infancy," * it would seem to be the latter.

Here, in passing, we should not neglect to notice the fact that if it were possible that nature be thoroughly and perfectly observed, not by one individual, (for this is not supposable) but by successive scientific explorers, still the conclusions in regard to the fixed order of nature and unchanging causation would depend upon their reports, and in the final analysis be a faith based upon testimony.

But we can not dismiss this objection so lightly, for it is at just this point that much of the opposition to Christian faith concentrates.

Mr. Huxley claims that "stress of science embodied in the fixed order and unchanging causation" of nature constrains him to his peculiar attitude toward the theology of the present age. Now we do not question his loyalty to science. We are quite willing that he shall stand forth as its redoubtable champion. We have no doubt that the science which he so zealously defends is embodied in nature, indeed this gives it its very "form and feature," that it is thus embodied exclusively, as though there were nothing but nature—nothing above or beyond. That one loyal to such a master should feel pressed

* For this and the preceding quotations from Mr. Huxley, see his "Lay Sermons, Addresses and Reviews."

by a great stress, we do not wonder, even if in the line of his asserted "unchanging causation" of nature, he should feel the stress of fatality. But in regard to this "fixed order and unchanging causation of nature," which so impresses Mr. H., is it an order fixed and unchanging? Mr. H. is the champion of a science which professes to be a science of fact.

Is he not over-confident just here, as well as over-zealous? Has his science demonstrated that the order of nature is fixed and unchanging? We need not stop to cite phenomena which indicate the contrary, which constrain those who regard only antecedence and sequence to exclaim with the old Ionics: "All things perpetually flow," and to sympathize with the common feeling of uncertainty, and the common expectation of changefulness—rather than changelessness. Countless illustrations are at hand; but Mr. Huxley admits the difficulty of predicting the future in even the simplest possible case, abandons "positive science," and reluctantly but legitimately raises the question: "How can we know that the next stone which we throw into the air will descend?" "The answer is that we do not know, but believe" that the stone will fall.

Hume declared that, in the last analysis, invariableness of antecedence and sequence is all that experience tells us of causation. Mr. Lewes, the biogra-

pher of philosophy, accepts this statement as right, and affirms that "all our ideas are derived from experience," and that "philosophy must end in skepticism." Yet even Mr. Lewes, one of the most positive of the positivists, says: "If we believe that similar effects will follow whenever the same causes are in operation, if we believe that fire will burn, we are simply believing in our experience—that is irresistible. Custom has primarily nothing to do with the belief; if we had only one experience of fire, we should believe that it would burn."

Some friendly apologist of Huxley may term his the incautious language of a bold experimentalist. But however this apology may be regarded by the fearless Professor, it is inapplicable to the cautious Lewes, and especially inapplicable to the copious but careful author of *Mill's Logic*. This precise dialectician is never, even in the moments of most earnest advocacy, betrayed into verbal rashness. Yet in his treatise on that most precise of precise sciences, *Logic*, we find statements (not isolated) of which the following may be taken as a specimen: "To certain facts, certain other facts always do and as we believe always will succeed" (B. III. Ch. V., Sec. 2). And again Mr. Mill observes: "We believe that fire will burn to-morrow because it burned to-day and yesterday, but we believe precisely on the

same ground that it burned before we were born," etc. Here is belief admitted—belief in a principle which certainly has never been demonstrated by the "positive" philosophy, and never can be—belief in this principle as fundamental and essential to every inductive process; and also a belief in human testimony for establishing the uniformity of a mere phenomenon, so far as the memory of man reacheth, and elevating the precedent into a fundamental, changeless law, when he says: "The proposition that 'the cause of nature is uniform' is the fundamental principle, or general axiom of induction." We do not stop now to question the validity of this axiom of positive philosophy; we merely call attention to the ready faith of the positive philosophers. We do not dispute the axiom itself of positive science. We might admit it upon the authority of reason, or of reasoning, inductive or deductive. But what right has the "Positive Science" to this axiom as a fundamental principle? Has experience shown it? Such a complete axiom of positive science demands a complete experience. The frank admission of Prof. Huxley is more consistent with logical truth and fairness than the careful assumption of Mr. Mill: "We do not know, but *believe*;" and the fullness of logical truth and fairness in this direction would be reached by an admission from the whole positive

school that, according to their system, such belief is blind and unauthorized.

Limited as these philosophers are by self-confinement to the sphere of sense, what advantage do they possess above the animal in respect to knowledge? If sense is all; if sequences make up the sum of knowledge; if the phenomenal is the only real, why may not the brute animal, with keener instinct and stronger senses, surpass the human animal in the possibility of knowing, and at length monopolize the realm of positive knowledge? The positive philosopher, at least, can not know, that this may not yet occur. Upon his own broadest claim he only knows what is—not at all what may be, much less (if there be a less than the least) does he know what must be. Doubtless he feels himself to be secure against the brute monopoly of knowledge, and believes himself to be master of the situation—believes.

But passing by this repeated fundamental admission of the principle of belief, how, we ask, does the human animal differ from the brute animal in regard to knowledge? First, we pause for a moment in the very field of the sense, common to both. Both conjoin phenomena in time, both construct phenomena in space. May we not, in such processes of the sense, at length completely fill all space and exhaust all duration, till there be no more time for

conjoining or space for constructing? Evidently neither the brute nor the man, furnished only with sense according to this theory, is authorized to deny that this may at length occur. Sense knows only what is, phenomenally. It can not say that space and time are infinite. This has never appeared to finite sense—never can appear to it. Indeed, sense can not say that there is any space beyond what appears to it already occupied by space-constructions. Now the brute cares not, believes not, beyond this (is not authorized or capacitated to by his senses); thinks not of space or time beyond what his experience has, in some way, traversed. The man, alike in sense, is different in thought, different in belief. He believes there will be time after the present; that there is space beyond what his eye, or any eye, has traversed; that though construction be added to construction in space, yet there will be room and still room for more; and, unlike the brute, he pushes out in successive projections into the all-surrounding space, and long after locomotion flags and the eye is weary, he puts ideal constructions into the beyond, unoccupied and illimitable. Whence this difference? Whence this idea of time and space to the man, and not to the brute? Have we found the ultimate ground on which human belief in space and time reposes?—reposes rationally not blindly, securely not

contingently—a ground underlying all the actual operations of human sense, all the possible operations of human sense? Shall faith—we appeal to the positive philosopher—shall faith be ruled out?

Sense perceives the collocation and succession of phenomena. This is its strength; this, too, is its weakness. Unaided by any higher faculty of the soul, this would be all it could accomplish; is all legitimately and logically, according to the theory of Brown and Hume—a theory so commonly pervading and moulding the modern positive philosophy, yet so often unacknowledged. But not only the general faith, the philosophic faith, also, passes beyond this. Logically, according to the sense-philosophy, this, its own faith, is blind; but really it is far-seeing in the light of reason. Logically, according to the sense-philosophy, it is false; really, it is true, confirmed by the authority of reason, which, by immediate beholding, affirms for the sense in all its possible experience this primitive intuition: the reality of space and time, illimitable each and both.

By the admissions of these philosophers, who are so often arrayed against Christian faith, we vindicate a place for faith. In tracing this philosophy, so often arrayed against Christian faith, we find a belief cherished, though by the system unsupported; and we find a support for it in the highest human reason.

Thus it is that reason in man helps out sense, for so is the human soul constituted that not even sense nor the sense-philosophy is left without the regulation of the reason. Significant in regard to the sense, as well as true, was the statement of Aristotle: "*οὐχ ὡς ἀλλογον καὶ τὸ ἀσθητικὸν θείη ἂν τις ῥαδίως.* *"

But, perhaps few thinkers, philosophic or non-philosophic, limit themselves, even theoretically, to the range of the senses, regarding the phenomenal as the only real and sequences as making up the sum of knowledge. Most persons recognize another realm of knowledge, the realm of the understanding, another process besides that of merely collocating phenomena, the process of connecting the phenomenal with the substantial, regarding sequences not only as following antecedents but as related to antecedents—qualities not as independent and alone, but as depending upon something which possesses these qualities and presents these appearances. They speak of attributes and substances, and believe in a real connection. They speak of causes and effects, and believe in efficient causation.

Now we commend this as highly rational, and therefore we are not a little surprised by the manner in which some of this class treat the question which underlies this discussion, satirizing faith as irrational,

* Aristotle, De Anima, Lib. III., 9.

and magisterially deciding that it be ruled out. We remind this whole class of objectors (be they few or many) that they have already adopted the principle of faith into their system and applied it in their practice ; that they have asserted their belief in the Unseen, even in substance as underlying qualities and attributes—in substance, which according to their philosophy, is never seen or heard or felt—in substance which never appears, but always eludes the keenest sense or the most curious search. The understanding, “judging according to the sense,” as it must, with no other guide (and these objectors recognize, and by their philosophy, can claim no other guide) makes a strange leap to a conclusion. By what authority, we demand, does it connect quality with substance? Though its appropriate function be to make such connections if the correlates exist, where has it found the correlates? Not from itself. It connects, only as the two—qualities and substance—are given. Not from the senses. They report only phenomena. Yet, these philosophers, who especially plume themselves upon rigid logic and discard faith in the unseen, believe in substance and allow the understanding to connect the attribute with the unseen underlying something, the phenomenal with the real. They speak freely of cause and effect and believe in efficient causation. Even Mr.

Mill says (Logic, B. III. c. xxi. secs. 4 and 5): "The law of causation must be received . . . as a law . . . of that portion of the universe which is within the range of our means of sure observation with a reasonable degree of extension to adjacent cases," and (B. III. c. xiv. sec. 7): "To endeavor in conformity with known laws to conjecture what collocations now gone by, may have *given birth* to individual facts still in existence, is the strictly legitimate operation of inferring from an observed effect in time past of a cause similar to that by which we know it *to be produced* in all cases in which we have had actual experience of its origin." (The italicising is ours.) Mr. Lewes, to be still more explicit, says: "If we had only one experience of fire, we should believe it would burn. To say that we can not know this cause, (that is, of any phenomena) can not perceive the relation, is no more a ground for the denial of the *causal nexus* than it is for a denial of an external world." And certainly the *causal nexus* connecting the antecedent and the consequent, completes the idea of efficient causation.

Mr. Darwin, on the Origin of Species, (summary of chap. v.) says: "Our ignorance of the laws of variation is profound;" and in the conclusion of his chapter on variation he affirms that, "whatever the cause of each slight difference in the offspring from

their parents, a *cause for each must exist*," etc. Prof. Huxley, in reviewing Darwin's theory, declares that "the co-existence of a tendency to minor variation with the tendency to general similarity, *whatever be its cause*, is of vast importance in its bearing on the question of the Origin of Species," (Lay Sermons, Address and Reviews, p. 264), and again (p. 265), in reference to the Ancon Sheep and the Gratio Kelleian family, he says: "Doubtless there were *determining causes* for these as for all other phenomena; (p. 266,) "Varieties *obey* the fundamental law of reproduction that like tends to produce like," etc.; (p. 282,) "A phenomenon is explained when it is shown to be a case of some general law of Nature;" and, to conclude these citations, (p. 283): "Harmonious *order governing* (governs) eternally continuous progress."

Whence, we ask, have they derived the principle of efficient causation in the material world? (for we have not yet spoken of a spiritual or non-material world. Indeed most of those who condemn faith as irrational, deny the spiritual and affirm only the material.) Not from the senses. They report only phenomena in space, sequences in time. Not from the understanding. It judges only by sense. The causative force does not appear. The most that sense can say is, that one event follows another—

that appearances succeed each other. Yet, as in regard to substance, so in regard to causality, these satirists of faith believe in efficient causation. This process, logically illicit, is their all-pervading practice in thought and action. We commend to these logicians their own standard rules in "The Art of Reasoning ;" and suggest a critical self-examination before they rule out faith.

By the admissions then of philosophic objectors in the realm of sense and of the understanding, we vindicate a place for faith ; and certainly in the presence of public opinion, faith as a principle stands uncondemned. On the other hand, the principle is approved by the common reliance upon human testimony by which questions of history are settled, questions of science accepted, cases of life and death decided, individual reputations, dearer than life, made and lost.

In this connection we should not fail to notice the theory of Herbert Spencer, which, while it allots to religion the sphere of the unknown and unknowable, and claims for science the province of known appearances, admits more than enough to vindicate a place for faith. Indeed he avows that "belief is our sole warrant for every truth of immediate consciousness." * Even " In the proposition ' I am,'

* First Principles, p. 28.

no proof can be found for it except the invariable existence of the belief in it."* We would ask is not this belief first and forever founded upon the consciousness of existence? And is not that very consciousness the proof, unceasing and unquestionable proof, of the fact of our existence? Each for himself accepts the truth not by blind credulity, not by stubborn determination whether reasonable or unreasonable; but because it is real, seen to be such by the reason, and therefore accepted without question. The reports of sense are accepted not merely because thus reported, for the senses may be disordered, and so the reports be viewed with distrust until corrected and adjusted by a higher authority—reason. But if reason itself be disordered there is no appeal for the soul—all is confusion. Even the senses, then, are trusted and convey to us a knowledge, not because external phenomena are the most reliable, not because knowledge of the external world is the only or the real knowledge, not because of "the invariable existence of belief" in the senses, but because reason sees that this is rational and secure. All things, indeed, end in mystery (as the schoolmen say) no less for sight than for faith; i. e., something is final—seen to be rational by the reason and therefore accepted, and not arbitrarily assumed

* First Principles, p. 27.

by the weary or willful seeker for the sake of a finality and rest.

We seek an ultimate datum or postulate, as Herbert Spencer* well asserts. But where shall it be found? In mere belief, as he affirms—mere belief however dark and uncertain? Or, shall it be in the light and security of the reason intuitively beholding the ultimate datum and pronouncing the postulate rational?

It is easy to see how Herbert Spencer, holding that knowledge is only relative and that nothing is truly known, would be driven to mere belief as the ultimate postulate and in the final resort strive to confirm this postulate not by reason, but by a broader and still broader generalization, until, if possible, he could ascertain the belief as invariably existing. Yet, it is evident that this task is really impossible, for human observation must be incompetent to establish a generalization as universal—a belief as invariably existing. And so, Mr. Spencer, rejecting reason as intuitive and reliable—rejecting reason and failing, as he must fail, to make a generalization universal, loses his “warrant,” his “sole warrant” for every truth of immediate consciousness, as well as for every primary generalization of the

* First Principles, p. 14.

truths of immediate consciousness, and is logically adrift without an ultimate datum or postulate.

Thus the positive system, which in its credulity founds upon mere belief, and not upon reason, and while it objects to faith more than vindicates a place for faith, by its own definition annihilates the very postulate upon which it founds, and sinks into inevitable skepticism !

Even belief, then, must be founded upon something which is ultimate, something which reason intuitively sees and pronounces to be ultimate ; a postulate, not because believed, but believed, because reliably pronounced a postulate. This postulate is either furnished by the human reason in its own light, or seen in the light of a divine revelation which the human reason recognizes as superior but not contradictory to itself ; so in regard to mathematics ; so in regard to æsthetics ; so everywhere.

The revolution of the earth is true, not because of the invariable existence of such a belief, for it has never been invariably believed, but because it has been seen by the human reason to be true. Not because it has been invariably believed, is it true that the blood circulates, but because, since the time of Harvey, it has been seen to be true. So in reference to Christ as a Redeemer, and Christianity as a faith.

Does not Mr. Spencer make belief—mere belief—the basis of the Positive Philosophy? Can the party of positivists logically repudiate the platform?

This “positive” conclusion shows how readily objectors adopt, as a philosophical necessity, the principle which they impugn when held in the interests of religion; with what facility religious skepticism can pass to the extreme of credulity in the domain of philosophy. Such men, we suggest, should be slow to stigmatize Christian faith as folly, and Christians as credulous.

In closing our indirect argument, we commend to the author of “The Biographical History of Philosophy,” and to all who maintain that “all our ideas are derived from experience,” the remark of Euler after having demonstrated certain properties of arches: “All experience is in contradiction to this; but this is no reason for doubting its truth.”

The positive school, who reject faith in reason and revelation, while they adopt it stubbornly and blindly in regard to sense and understanding, judging according to sense, clamor for *law*. What is this vaunted shibboleth of a system which assumes that “all our ideas are derived from sensation?” Not a principle binding together by inherent force and authority, but a mere generalization from successions, not even a connection or relation. To-day,

it may be; to-morrow, it may change, by a new observation. The law is, by the very system, made dependent on the generalization, not the generalization dependent upon the law; the principle dependent upon the process, not the process dependent (as it should be) upon the principle. Such a law, we submit, is null and void—its binding force is equal to that of a rope of sand.

We ourselves believe in law no less heartily than do the most positive of the positivists. We not only believe, without misgiving, in the lower law which pervades all nature, and which the scientist is noisily and haughtily pursuing, while the philosopher is silently and reverently tracing; but also a higher law, (and a law-giver) which comprehends and controls all things. Indeed, in the very existence of law, even in the lower law, for which the revilers of faith clamor, we may, as we proceed, find a vindication for faith; and in the lower and the higher circuits of law, may there not be found to reside a resistless authority for faith? Faith is a phenomenon by no means rare. Does it not exist by law as really as does any phenomenon in material nature? It would be well for the objector to ponder this question before hastening to decide that faith be ruled out. Employed in its true sense, we like this term law, just now so pretentiously monop-

olized by those who "positively" emasculate the vital force of the term. It involves much of the case at issue. Involving more than the materialist, more than the fact-philosopher admits or logically can allow, it proves too much for him,—that faith as a fact will not, can not be ruled out. It may even appear that whoever undertakes this, makes more than a futile, makes a suicidal attempt.

Law, if it exist at all, exists not as a generalization, but independently of the generalization and before it, as an informing, controlling, connecting principle—detected perhaps by the generalizing process, but not *as* the generalization which the observer makes, but *as the basis of it*, without which even the generalizing process would not be scientific but arbitrary. It is only thus that each particular science can legitimately seek (as it does seek) "a principle of unity," which will "account for the phenomena in its own realm," which is not a mere verbal fiction, as it must be in the "positive philosophy," but a real force and law, as it is in nature. So, universal science, or philosophy in its highest range, may legitimately seek for a higher law, a principle of absolute unity. Whether by human searching it be found or not, what man of science practically doubts its existence? What true philosopher, what real Christian, doubts its existence? (And law implies a law-giver,

and has "its seat in the bosom of God." But this point must be postponed to its proper place.) We can well sum up our thought upon law by the incidental reference of Dr. Tayler Lewis upon a very different theme: "The forces and laws of nature are not properties of matter; that would be sheer materialism. They are not the offspring of matter, born of it, but the seminal powers themselves mysteriously working *in* matter, controlling matter, making the earth and the waters bring forth the living forms. They were *sown* when 'the Spirit brooded upon the waters,' in that first mysterious night of Creation."

The existence of natural laws underlies science and gives it possibility. Observation, which leads to science, proceeds upon this very principle, the existence of natural law. As we believe in the one as a grand reality, so we believe in the other as a grand possibility. We have no quarrel with science. On the contrary, we welcome its advance. We hail it as it has ever proved itself to be, when matured by reflection, the friend of faith, the ally of religion. Science as dependent upon human observation has its appropriate range, and within that range may be a desirable guide. It can give us classified knowledge. It can elaborate a system of general principles, but not a system of universal and necessary principles. As observation proceeds, science must

readjust itself. Complete scientific knowledge is possible only with complete experience ; and where shall such experience be attained? Scientific conclusions, lodged as they are in human opinion, must be held subject to possible modifications, by possibly new observations, the hypothetical " may " forever hesitating to rise into the positive " must." How can science positively deny a God when by its very nature it proposes to traverse only the finite? How can it positively deny spiritual realities on which religious faith fastens, when it contemplates only the phenomenal? How can it positively deny a first cause, when it is wholly uncertain whether it has traced the complete length of nature's line? How, if it positively deny a First Cause in the line of nature, can it deny an originator of nature and of natural causes, even a Creator? How can it positively deny a final cause or final causes, when its observation has not yet reached the end, as it has not yet reached the beginning of nature? How can it be positive even within its own narrow range, when its observations are as yet only partial, its classifications contradictory, and its theories hypothetical and conflicting? How, in fine, can its arrogance reach so far as to demand that faith be ruled out, when its own ultimate basis is belief?

Within this field of the philosophic and finite we

have traced the admissions of objectors, vindicating a place for faith, until by logical necessity they end in making faith—belief—the “ultimate datum or postulate,” the “sole warrant for every truth of consciousness, and generalization, and demonstration,”* a warrant not even claiming the authority of reason! a belief that is blind! Such admissions should, to say the least, silence objection against faith.

This indirect argument, *argumentum ad hominem*, which we have employed only as a defense, can easily be seen to furnish a direct support, since it shows that the ability for faith and the tendency to faith are native to the human soul.

But we do not depend upon the admissions of objectors. We turn from the indirect to the direct argument to establish within the field of the philosophic and finite, a place for faith upon positive and reliable grounds. This argument we base (*a*) upon facts of Intelligence; (*b*) upon facts of Conscience; (*c*) upon facts of Volition.

(*a*) The philosophy which would confine itself to fact and discard faith has not exhausted all possible facts when it has traversed the entire material world and penetrated all the mysteries of physical nature. If nature be known, it is known as what? According to the first objector, only as material phenomena

* Herbert Spencer's "First Principles," p. 28.

collocated in space, conjoined in time ; according to the second objector, only as material being and phenomena related, or as effect and cause connected. But now suppose, "Man is descended," according to Darwin, "from a hairy quadruped, furnished with a tail and pointed ears, probably arboreal in its habits, and an inhabitant of the Old World," yet we have men to deal with, human nature to observe and study scientifically. This study, to say the least, is as important and exalted as the study of material or brute nature.

In the utmost range of physical sense, thought is not included, although it is the most common of all facts, ever present and ever-changing. Affections, passions, are not included, although they are cherished by all, and are unquestioned facts. Moral acts, choosing, willing, are not included, for, although exercised by every person, and constantly exercised, they elude the observation of the five senses.

Here, then, is a world of facts so different from those of the material world, that the very senses which give us a knowledge of the latter, utterly fail to give us the least notice of the former. What world is this?—certainly not the material. The order of facts by which it is known is metaphysical. How shall these facts be perceived? How shall we hold communion with this world of thought and

feeling and volition? It matters not what this world be called. Call it mind, or spirit, or soul; it is at least not material, not physical. This world is not without, but within us. Any person to know it, must know himself; that is, be self-conscious. Any person to study it, must attend to his self-consciousness. We, then, have found this second world, so entirely different and distinct from the material world; and found the means of observing its facts. This second class of facts is especially worthy of our observation as related to our very being, and most accessible as lying within the soul's self-comprehension. The boastful philosophy of fact is positively and logically bound to self-attention and self-study.

It may be claimed by some persistent objector that even this new world we occupy in common with the brute, for the brute thinks and feels and wills. We do not stay to discuss this incidental question whether in mind the man is superior to the brute. If the philosophic objector insists that mentally the brute is his equal, we shall not insist to the contrary; and, if he prove his assertion even to a demonstration, we only reply that in all fairness it entitles the brute to the same intellectual credit and advantage with the philosopher.

In this world of thought what are some of the distinctive facts which we are to observe? First,

not only that there is thought, but the consciousness of something thinking—the self-assertion of a mind or soul, and not only a soul and thought, but thought about an external event as different from the thinking, or about an external object as different from the thinker; and further still, about an external object as the real substance, non-appearing, but underlying certain qualities which do appear, and about an event as produced by some cause. While, then, there is the fact of self-recognition—the fact of conscious self-activity—the fact of sharp and decisive discrimination between self and not-self—between the internal and the external phenomena, there is also the assertion, as a fact, that the soul is the cause of the internal phenomena and not of the external, and thus there is a distinction not only between the two kinds of phenomena, but also between the two kinds of causality, as distinct as the two kinds of phenomena. And further, there is the assertion not only that the event has a cause and the quality a substance, but that every quality, every attribute, is thus related, and that every event has a cause. This the soul unhesitatingly believes. How, we demand, are we to account for this not general but universal, not adventitious but necessary conclusion? However we have felt impelled to ask a similar question before, in view of the principles of space and time as conditional to all the

processes of sense, and of the principles of substance and causality as conditional for all processes of the understanding, we can not longer postpone the question. Whence do we derive not only these conditionals for the sense and the understanding, but these ideas of the universal and the necessary? No perceptions of sense can discover these. No generalizations of the understanding can reach, much less furnish them. To deny their possibility is fallacious, for already we have them. They are in the mind. They are in the world. Whence are they? They are fundamental affirmations of the mind itself. It is itself the place of these principles. Call it, if you please, the high intuitions of the soul. Call it reason, as higher than the senses or than the discursive logical understanding. These principles exist, are employed, and are thus furnished. If these be furnished by the reason, then it would be, to say the least, irrational to ignore or disbelieve them. If furnished by the soul in the exercise of its higher power of whatever nature, it is equally irrational to disbelieve or ignore them. They are intellectual principles or starting points for all our positive knowledge, empirical or philosophic, intuitive or adventitious.

In thus tracing the line of mental facts we have reached a point which separates between man and brute. In the former we find this place of principles,

which is wanting in the latter. Whatever of sense or understanding the brute may possess, he does not possess human reason, the place of principles—first principles—belonging to the very furniture of the human soul, necessary and universal, like the notion of all-pervading space and of all-enduring time, of substance related to attribute and attribute to substance, universally by and necessarily related ; of effect related to cause, and cause to effect, universally and necessarily related.

Here, then, in the possession of reason, and not merely of reasoning as judgment according to the sense, is the human mind immeasurably exalted above the brute. Sublime as are the terms in which the great English dramatist characterizes the human reason, they are more than deserved.

Here, also, are principles universal and necessary, furnished by reason, which the individual and the general faith accepts. Here are facts of intelligence which, within this department of the philosophic and finite, furnish positive and reliable grounds for faith. We might specify other facts of intelligence : æsthetic principles, which are the source and the security of fine art ; mathematical and philosophical principles, which guide and govern science in its varied directions ; but we turn to consider another class of facts,—

(*b*) Facts of Conscience. We have a sense of right and wrong, of obligation, of responsibility. We feel complacency or displacency as we recognize this standard in our actions, yield to this obligation and meet this responsibility, and we apply substantially the same principles to our own expectations and estimates of others. The terms merit and demerit are applied everywhere, and everywhere to human agents, and not only are innocence and guilt ascribed, but reward and retribution are universally expected. Not only do we feel assured that these are applicable to man, but as surely that they are not applicable to animals. By the necessity of the case, the boldest objector admits the theory of morals in respect to man, and by the same necessity he does not, can not, predicate morality of a thing or an animal. As well speak of "a pound of virtue or a peck of truth." We cross a permanent line of separation before morality begins. Without reason and conscience there can be no free-will. Without reason, and conscience, and free-will there can be no responsible action. The beast has cognition, and feeling, and choice, or selection; but it has not reason and conscience, and in consequence, no free-will, and therefore no morality. Hence it is evermore thing, and not person. This the objector must admit, but the admission is vital in its relation to faith in

man and to the faith of man. The animal may exercise prudence at the dictate of the understanding, and as a result of experience. But morality appears only in the presence of reason and conscience. "Conscience," as has been well said by Pres. McCosh, "Conscience discerns moral quality only in voluntary acts, and pronounces its decisions upon such acts alone." "The soul itself asserts for man the duty to resist and subjugate all the clamorous appetites of sense and hold them in perpetual servitude to its own ethical end." (Pres. Hickok.) Experience everywhere confirms the soul's prejudgment, that if "we bow our personality to the ends of animal gratification, and in our depravity make the ethical to serve the sensual, degradation and debasement shall inevitably follow and remorse torment us as a gnawing worm." (Hickok.) The human soul in the possession of reason and conscience, and a will at liberty to obey or disobey, stands forth a moral being, a person and not a thing. Across this line of separation the brute never passes. Within this higher moral realm, dull matter is never for a moment thought to enter. Everywhere in this realm of fact conscience appears, and here alone—conscience accusing or else excusing; witnessing evermore to the principles of right, obligation and duty. These ethical facts pervading the human soul and peculiar

to it, so far as our observation has yet reached—these facts demand the consideration of even the most positive philosopher, with a claim at least as exalted as the facts of dull matter.

Whence the principles which underlie these moral facts? Not from material nature, though watched by every sense. Not from generalizations, however broad or skillful. The law is not from without, but from within—"the law written in the heart." It is the soul itself with the highest reason asserting this claim in its own right; and the witness of conscience is, evermore, that although the spirit of a man may sustain his infirmity, a wounded spirit none can bear. Here, in the light of reason, and with the witness of conscience this law appears, binding together the moral facts to which we have referred, and itself a fact pervading every human consciousness—a law higher in its authority and in the estimate of the human soul than any other law within the realm of sense or the sphere of the understanding, and therefore every possible end within those limits must be subordinate to this ethical end. In the soul's just estimate, moral character is of highest worth. To deny this, would be to deny one's own reason; to disbelieve, would be to impugn the testimony of one's conscience. In the presence of this inalienable right, the human soul becomes conscious of its in-

herent personality ; and responsible choice becomes possible. The will may go forth by the authority of reason and the witness of conscience to choose the good, to act worthy of itself, when reason and understanding and sense are in accord, and if they are in conflict, still to act worthy of itself by choosing the good and refusing the evil. The common faith asserts itself in the supreme authority of the right, and in the superior worth of virtue or obedience to this authority. In this statement the principle or basis of the right is not specified, nor is it affirmed that the determination of this principle is always the same ; but this being determined, as it always is for the soul in some way, the statement remains true that the common faith has always regarded the right as of supreme authority, and virtue or obedience to this authority as of superior worth.

And here we may say in reply to any philosophic skepticism, that if, in the processes of perception, we may proceed on the belief or assumption of space and time for conjoining all phenomena, if in the processes of the understanding we may proceed on the assumption or belief in substance as the ground of connecting phenomena, why in the higher process of morals is it irrational or unscientific to proceed on the belief or assumption of the principle of right with its accompanying consequences of

obligation and responsibility? We do not say, however, in either case—whatever the skeptical objector may assert—that we proceed upon assumption, but rather upon the most valid ground, the principles of human reason. Indeed, we have carefully observed the legitimate rule of induction: that, “in the universe objectively considered there is an intelligent and wise adaptation of powers and laws to natural ends, and that the same is true of the relation of the universe to the knowing mind.” (Pres. Porter.)

At this point of our advance, with the unquestionable facts which we have attained, we pause to ascertain the mutual attitude of faith and reason—intellectual or historical faith, for we have not yet reached the field of Christian faith. Is it an attitude of repugnance? On the contrary we confidently declare a harmony between faith and reason.

Has it not been the common faith of the learned and the illiterate, that there is in nature substance as well as quality? That the phenomenal is related to the real, and must be so related? That causes produce effects, and that every effect must have a cause? That there is space beyond the reach of the longest human vision, even immensity? That there is a past beyond all finite experience, and a future no less extended, even infinite duration? That there are phenomena unlike material phenom-

ena? That there is an internal world different from and distinct from the external world? That this world of thought and feeling and volition is as real as the world of extension and figure and weight? That the human soul, the knower, is as real as matter, the thing known? That the will can choose between good and evil, since there is a rule of right to which the human conscience doth witness? That not the thing is responsible, not the animal, but the person thus morally endowed?

Instead of discord, thus far, between faith and reason, we find that faith has relied upon the authority of reason for these fundamental beliefs, and thus faith has been throughout consistently rational—saved, on the one hand, from credulity, or believing without facts, and on the other hand, from superstition, or magnifying facts without reason. Thus in this highest sphere which we have yet reached—although there remains a higher still for us to consider—faith is shown to be not only consistent with reason, but as it has been beautifully defined to be: “The fealty of the finite will and understanding to the reason.” (Webster’s definition quoted from Coleridge.)

(c) Facts of Volition. Here we reach another question of Faith, closely allied to what shall follow—in a certain sense fundamental to it—the question of human depravity. The human will at variance

with reason and conscience constitutes depravity. In regard to this it is undeniable that a belief in human depravity has been the common faith of mankind. Whether this is authorized, is rational, may be positively determined. The facts are quite within the reach of our present advance, although we are yet wholly within the sphere of the human and the moral. This doctrine has not been originated by any religion, certainly not by the Christian religion. Yet it is common to all religions. By the terms of the statement, (depravity is the will at variance with reason and conscience) as well as in the nature of the case, it is evident that depravity is a fact originating from within the human soul, and not an effect wrought by an external force like necessitated causation in the material world. Neither can it ever become a necessitated cause producing unavoidable effects like those in the material world. It is not imposed upon the soul, to be inevitably suffered as misfortune, for it is the will itself in its own act at variance with reason and conscience. "Sin is a quality of voluntary acts. It always resides in some mental affection or act in which there is the exercise of free-will. The guilt of the sin thus always lies with him who commits it." * And again on the other hand, "Moral good lies in the region

* Dr. McCosh's *Intuitions of the Mind*.

of the will. By this I mean that every truly virtuous act must be a voluntary one."* "Sin is a malady which has infected mankind, differing from any other disease only in this, that it emanates from the will and involves guilt."†

Depravity is not introduced into the soul surreptitiously, exonerating the soul from responsibility, and transferring the guilt to another. It is the will itself in its own act, at variance with reason and conscience. If depravity exists, it is subject to the inspection of self-consciousness. The question is one of fact. The consciousness of the race can testify directly and conclusively. Each person feels it for himself; and almost every one confesses it of himself, or asserts it of his neighbor. If any deny this, they are at most only a persistent few, hardly enough to furnish the desirable exception requisite to prove a rule. The best men daily and penitently make humiliating confession; and bad men more than admit the fact by their denial. The purest man sadly finds how difficult the task to master appetite and desire and passion and self-love; to control the senses; to govern the thoughts; to regulate all the words; to guide the whole conduct in every relation; to bring all into strict and willing conformity with the rule of his own reason and con-

* Dr. McCosh's *Intuitions of the Mind*.

† Dr. Fisher's *Boston Lecture*.

science. This is the testimony of self-consciousness in the case of the individual. "But when he hath parents and children, friends and enemies, buyers and sellers, lawyers and clients, a family and a neighborhood—then it is that every man dashes against another, and one relation requires what another denies; and when one speaks another will contradict him; and that which is well spoken is sometimes innocently mistaken; and that upon a good cause produces an evil effect; and by these and ten thousand other concurrent causes man is made more than most miserable." These statements of Jerémy Taylor commend themselves to human experience and observation. His illustration of this moral truth is so apt, that we shall be pardoned for transcribing it: "This being the case of all the world, what is every man's evil becomes all men's greater evil; and though alone it is very bad, yet when they come together it is made much worse. Like ships in a storm, every one alone hath enough to do to outride it; but when they meet, besides the evils of the storm, they find the intolerable calamity of their mutual concussions; and every ship that is ready to be oppressed with the tempest, is a worse tempest to every vessel against which it is violently dashed. So it is in mankind." So this testimony of the individual self-consciousness becomes but a sample and

a part of the accumulated testimony of the general consciousness of mankind. This appears in universal language and literature, in law and religion, in the demand for government and the difficulty of governing well, in the rule and the misrule which make up the political history of the world. These words, this literature, these laws, these religions, etc., exist in the world as facts which none are at liberty to ignore, and, least of all, the positivist or fact-philosopher. These facts are the outgrowth and the witness of the human consciousness; and prove, as no fact can be more strongly proved, human depravity, the will at variance with reason and conscience, choosing not everywhere and always the highest good—not always and everywhere unswervingly pursuing the right.

Depravity is a fact, “which all deep-thinking men, heathen or Christian, have united in deploring, a fact which Seneca declares almost in the language of Paul,”—a fact recognized and emphasized not only in the Bible, but in the Promethean fable of Asia Minor, in the Brahminical writings of India, in the significant symbol of Cupid and Psyche; pervading indeed all the myths of the Greeks and the Romans, and constituting the chief element in the mythology of the East and of the West.

The most positive of the fact-philosophers can

not impugn or condemn our method of determining this question, severely inductive as it is; asking as we have done, not what may be, but what is—not even what is the law, but what are the facts; receiving testimony not alone from the senses, which might be deceived, but taking the testimony of the individual consciousness and the conclusive testimony of the common consciousness of the race. Pantheistic and materialistic atheists, ancient and modern, have suppressed this confession only by denying the distinction between right and wrong—a distinction which we have already found pronounced by reason, and witnessed by conscience, and accepted by the common faith of mankind as inherent and essential. By such denial they have disqualified themselves in the presence of reason and conscience as witnesses upon the question just now at issue,—the question of depravity.

The belief of mankind, then, in human depravity is confirmed by fact; and, by the decision of reason should not be ruled out—can not be. Sin is in the world, and guilt, with their attendant evils. To what extent sin has impaired any of our faculties, even the noblest, and thus necessitated divine help in our weakness, and divine light in our darkness, we need not here attempt to determine. Sin is in the world. The great question confronting us here is,

How shall sin be treated? With punishment, or atonement? Shall there be redemption, or judgment? If atonement be allowed, how and on what conditions shall it be made, and how shall it become available for sinners? This question, which concerns us most, this greatest question which can possibly meet a world of sinners, human reason can not answer. This must rest not with the sinner, but with the moral governor. This necessity impels our inquiry to another and higher field,—the infinite, the religious. Thitherward faith, rising above the philosophic and the finite, looks intently, anxious for light and help. The revelation may, must transcend human reason, not to contradict, but to save. As Lessing, who will not be suspected of partial witness here, has said: “’Tis a proof of the truth of Revelation, if reason finds in it truths which exceed reason. Whoever despoils his religion of such truths has as good as none; for what is a revelation which reveals nothing?”

By indirect argument, then, and by direct argument, within the field of the finite and philosophic, we not only vindicate a place for faith, but establish it upon positive and reliable grounds; and thus exclude skepticism as irrational and philosophically impossible.

As incidental to the main discussion, it is obvious

to remark that the view presented utterly precludes mere Materialism on the one hand, and mere Idealism on the other. If this view be correct, there is both a material universe of ever-changing phenomena, produced by ever-acting causes, related to ever-during substances ; and a (mental) spiritual universe, no less real, no less active, no less multifarious in phenomena.

It is also obvious to remark that, according to this view, the final centre, around which the universe of matter and the universe of mind revolve, can not be pantheistic ; for mind everywhere and always recognizes its individual personality, freedom, and responsibility—its own self-hood, separating it not only from all surrounding material objects, but also from all other minds. This very assertion of self-hood denies, with all the emphasis of endless and countless iteration, the possibility of pantheism. The centre, self-supporting, all-supporting centre, is beyond the finite and philosophic. There is not a pantheistic whole, and the centre can not be pantheistic.

CHAPTER III.

FAITH AND POSITIVISM.

The Field of the Religious and Infinite.

FROM the field of the philosophic and finite,* it is easy to pass to that of the religious and infinite. Indeed, true philosophy not only points out the direction, it conducts us far along the way. In this connection positivists will readily recall the saying of Bacon, distinguishing between shallowness and depth in philosophy; and rationalists will not forget the declaration of Coleridge, that "philosophy leads us ultimately to religion." It is unnecessary to recount the long list of eminent names to show that the great leaders in philosophic thought have been profoundly religious. Not only has philosophic prose been religious, but philosophic poetry has taught us to "look through nature up to nature's God."

While common poesy has fondly and freely roamed the field of devotion, poetic genius, like that

* See Chap. ii.

of Milton and Dante and David, has attained its loftiest flight in sacred song. While philosophy points us beyond the present and the visible, it is especially true that religion points to the invisible and the eternal. Even Comte, at the bottom of the scale, striving to be persistent in positiveness, sought to deify the phenomenal, but was carried beyond himself to acknowledge a Religion of Humanity and adore the Grand Être, while woman was chosen only as the symbol of the real divinity he would revere. Herbert Spencer bids us worship, not the sensible and the finite, but the mysterious and the infinite. Religion has been no more prevalent than irrepressible in its impulse to trust and worship something other and higher than itself, and to look to something superior to the present—the climax, both in power and permanence, of what faith, in its varied surroundings and its various stages of development, could reach. This appears in every form of religion. With the cultured and the uncultured, having the same object in view—resting satisfied only with an object for its worship and dependence higher than the finite and the dependent—one that could defend, protect and bless the worshiper.

Not only, then, is it a fact that religious faith does point and impel us toward the infinite, the

supreme, but it requires only a moment's reflection to see that in the nature of the case it must do thus. Nothing less than the Supreme can defend, protect and bless the trusting soul. Anything less must, by the very terms of the supposition, be untrustworthy. We are led by both lines of thought,—the physical and the metaphysical, the scientific and the religious—to the urgent question of the day, the paramount question for all time: Is there such an object? Is faith in God valid?

In reply we pursue, in this field, as in the field of the philosophic and finite, two lines of argument: the indirect and the direct—by the first, to vindicate a place for faith, by the admission of objectors—by the second, to establish a place for faith upon positive and reliable grounds.

We indicate, by a few examples, the line of indirect argument, which is capable of indefinite extension.

At the outset we meet this universal admission of objectors,—the acknowledged inability to prove that there is no God. By this one fatal admission, all atheistic arguments remain self-condemned as inadequate and inconclusive.

Again, all skeptical theories admit that something is. (We do not even reckon as a theory the suicidal assertion that nothing is, for then the doubter

is not, and can not even doubt.) All these theories admit that something is; and by the labored attempts to account for its existence, they imply the obligation to answer the great questions which press upon us evermore: Whence? and How? and Why? Now, within the limit of this admission, what are we to account for?

Even Mr. Spencer, positivist as he is, accepts the testimony of consciousness, and admits that we know ourselves at least as well as we know the material world which lies around us. "The personality of which each is conscious, and of which the existence is to each a fact beyond all others the most certain," etc., etc.* The admission is by no means gracious, for "Positive Science," so far forth as it is a science, has its real basis not in external nature, but in the mental constitution of man.

But Mr. Spencer admits still further,† that "it is rigorously impossible to conceive that our knowledge is a knowledge of appearances only, without at the same time conceiving a reality of which they are the appearances; for appearance without reality is unthinkable." And Mr. J. S. Mill (Introduction to Logic,) admits: "Whatever is known to us by consciousness is known beyond the possibility of question."

* First Principles, p. 66.

† Ibid. p. 88.

Now, we are conscious of thought, and of ourselves as thinking. It is obvious to remark that, on the one hand, material nature can be known only as there is a mind to know it, in a word, only as there is a knower; and, on the other hand, that while we can know it, yet material nature can not know us. There is this ineradicable distinction between mind and matter.

But, farther, will any positivist admit that there are any other beings like himself, other minds capable of knowing and being known? The admission outruns the inquiry, and becomes a positive assertion as strong as the knowledge of his own existence. But that other minds exist, he can not know by self-consciousness, as he knows himself, nor by perception, as he knows matter; yet, he may know by many infallible proofs—proofs of intelligence, of emotion, of volition, proofs of reason and of conscience; and the knowledge is, henceforth, valid and rational. Since by this general admission, whatever is, needs accounting for—by this special admission the knower and the known, mind and matter, both must be accounted for, and, according to the farther admission that we may know, as existing, other minds than our own—know not by self-consciousness nor by perception; but by a process valid and rational, even by undeniable proofs of

mentality—the limit and the significance of the task, both, are multiplied. This admission, which is inevitable, opens at once a logical and valid way of approach to the knowledge of God, the Infinite Mind. This may not be the only way, it may not be the best way, but it is at least as valid as the way by which we reach the knowledge of other minds. Indeed, the knowledge gained by this way of approach to the Infinite may, by its repetition and accumulation, become much more abundant.

But, here, we shall be met by a school of nescients with the objection that God is infinite, and therefore, we can not know him, that God is not bounded by finite relations, while our knowledge is relative.

In this very objection there is involved an important admission,—the admission that God is, and that He is infinite. But farther, it is not only admitted but asserted that He is infinite; hence, especially, comes the theory of nescience in respect to God. But in all logical fairness, does not the admission or assertion prove too much for the objector? How can he assert that God is infinite unless he knows that God is not finite? By the very terms of the admission does he not claim to know the Infinite, as sustaining to everything else the relation of the unlimited to the limited? This is sufficient for our argument.

But we pause here long enough to ask these knowing nescients if, according to their admission, God is, does he not sustain the relation of Creator, (not as dependent, but as originating,) of Upholder (not as dependent, but as sustaining) and Governor of all things, self-acting, self-sustaining, self-regulating?

Sir William Hamilton asserted all this promptly; and Mr. Spencer admits that, "to say, we can not know the absolute is, by implication, to affirm that there is an absolute," and, if absolute, then Author and Finisher.

If it still be insisted by the school of nescients, that we do not know God adequately or completely, and therefore we do not know him; we reply, that although we do not know him entirely, we may "know in part," and, so far forth, know him really. Though we do not know him adequately, yet we "know in part," and, so far forth, know Him. The most persistent theist would claim no more than this. The school of nescients admit and assert that we know finite minds and finite matter. But, we ask, do we know matter and mind completely? Not even superior men, like Hamilton and Spencer, would make this claim. They and their disciples would readily admit a want of complete knowledge,—a knowledge only in part. This admission, again, proves too much for their objection to a knowledge of the

infinite—for, is not their knowledge of finite mind and matter, though incomplete and “in part,” yet real knowledge so far forth? This school of objectors, by their very claim of nescience, have denied themselves all possibility of reply; and, from this point henceforth, so far as pertains to the knowledge of the infinite, must remain in self-adjudged silence.

But we notice another grave and general admission. This is implied in the labored, repeated, and unsatisfactory attempts to account for what is, and for what appears, issuing in theories which ignore or deny God’s existence—theories which have been proposed and withdrawn by the originators—theories which have been offered to the public and rejected—theories at first carefully elaborated and then modified, subsequently changed and changed afterward, and then changed again and again, and at length appearing as modern theories with modern form, but with antique lineaments betraying their real ancestry, as if skeptical selection or atheistic preference had played the scientific trick of Reversion, and, at one fearful leap, had bounded back, sheer across the interval of civilization to the period preceding even Comte’s lowest grade of human thought (styled) “the theological.” Were all these theories authoritatively challenged to give their name, the answer would be: We are legion. These theo-

ries, fanciful and varied as they have been from Democritus to Darwin, we need not trace ; theories too narrow to account for life and intelligence, and more especially too narrow to account for reason, free-will, and conscience, which demand an adequate cause, and reiterate this demand, in the dignity and light of their own authority. It is easy to see, that because of inability to meet this very demand, skeptical theorizing has veered toward materialism.

But we pass to the direct argument, the positive answer to the question : Is faith in God valid ? The idea of God is in the world. However well or ill conceived, however strongly or feebly held, philosophically developed it implies supreme Being, supreme in all excellences which reason, the lowest and the highest reason, can discern : Supreme existence or self-existence, supreme action or self-action, supreme government or self-government, that is, a personality Supreme. The idea of God has universally prevailed. It has persistently endured amid all the shock of contradiction and question, amid all the change of philosophies and policies and politics, showing its deep and ineradicable acceptance in the hearts of men. To question it now, or attempt to invalidate, is logically to assume the *onus probandi*. It is absurd to say that the idea is irrational, for it has been accepted by the profoundest thinkers.

To say that it is difficult to reach is no less absurd, for the lowest civilization as well as the highest, has heartily and pertinaciously held it. To say that it is the outgrowth of civilization is as absurd, for the earliest history and language have it, and have it in its purest and loftiest form ; for instance, the history and language of the Hebrews. No expression of it in modern or mediæval times has excelled or equaled its early majestic statement. This appears everywhere in the Old Testament, to which we refer not now as inspired, but simply as historic records universally admitted to be of the highest antiquity. To say that the ontological argument or any of the theistic arguments is irrelevant, or inadequate to establish the conclusion, does not avail, for the conclusion has been reached by common consent since these arguments have been criticised, and long before they had critic or champion, perhaps before they were formally stated, possibly before they were even thought of.

The idea originated and has been perpetuated in the public and the philosophic mind, in some way that seemed at first, and has ever seemed relevant and valid. It were well, at the outset, to detect this way and follow it in the line of our direct argumentation, noting at the same time the accessory proofs that lie along the way.

This is not the way of the senses merely, for never until man appeared on the earth was the idea of God entertained ; and since that time it has been entertained by man alone. However superior the senses of beasts, or however sure the brutal instinct, the brutes regard not, seek not, know not God.

It is not the way of the understanding, judging according to sense, for the understanding, as the word implies and as its office necessitates, refers the phenomena of the sense to the substance in which such phenomena originate, and the substance to the phenomena.

But a higher human faculty, the reason, looking above and beyond sense—looking above and beyond the understanding, may, does, see a profounder reason as fundamental for its own finite self, and *a fortiori*, fundamental for the sense and the understanding, a being unconditioned, as origin for its own conditioned being.

This far-reaching conclusion of the highest faculty of the human soul is regulative for itself, and, again *a fortiori*, can not be denied or questioned by the inferior faculties of the soul, the perceptive and the elaborative—that is, the sense and the understanding.

Even if God should reveal himself to the human senses, either visibly or audibly, the sense must

appeal to reason to decide, whether it be the revealing of God or of something else—whether for example, it was an earthly dove from the dove-cotes of Jericho flying down to the Jordan, or the Holy Spirit descending like a dove from heaven and resting upon the Son of man—whether it was an earthly sound striking upon the ear of Adam, or the voice of God walking (coming) through the garden in the cool of the day to commune with the first-born of the sons of men.

So, *a fortiori*, any premises furnished by Sense for the Understanding to place in syllogistic array for a demonstration of the Divine existence, would demand the criticism and supervision of the higher faculty, the Reason, to ascertain whether the premises were valid for the Sense, and whether the logical process of the Understanding were licit, before the soul would rely upon the conclusion as trustworthy. This may be found in our higher spiritual nature, in which man essentially differs from the brute. It is opened to us by the affirmations of the Reason—of the reason as more or less developed—of the Reason without which man would not, could not, rise to the idea of God. That this view harmonizes with divine Revelation will more fully appear in the proper place. It is, however, important to remark here, in passing, that the Scriptures refer to

this greatest of all truths,—the Divine Existence—not in the method of proof, but of illustration. Taking for granted this fundamental truth, the Scriptures appeal for its recognition to the human soul as already informed of it, so that, at all times and to all men, this appeal may be justly made. Gen. i. 1 ; John i. 1. *et passim.*

This view best explains, and is at the same time confirmed by, the fact that religious faith pervades humanity. While this remarkable fact demands explanation, it has, also, the force of a two-fold argument. The fact is indisputable, its antiquity is settled, its universality is admitted, its tenacity has overcome all open violence or concealed treachery that would subvert or destroy it. It has ever harmonized with the loftiest aspirations of mankind, contributed to their best welfare, resisted and successfully held in check their baser passions and evil tendencies.

The view just hinted at as the philosophic and scriptural one, explains this ; reveals at once the source and the strength of religious faith ; shows that it originates in man's higher, spiritual nature, and relies upon the unalterable affirmations of the reason, the far-seeing faculty, and the regulative authority of the human soul.

As a fact ineradicable from human nature, it has

the force of a convincing argument ; and, again, as a fact ineradicable from human history, it has the argumentative force of immemorial possession. Logic and law always admit the force of this argument, and, if, according to the view of common law, a few years confer the right of possession, how shall the force of argument be multiplied immeasurably, when the possession doth extend as far as the history of man runneth ?

But this view requires careful limitation. It is sometimes asserted, as by Rothe, Schleiermacher and others, that we have an immediate consciousness of God. This statement is apt to mislead, on the one hand, by confounding the reason's affirmation of God with the consciousness of external phenomena by a sense-perception, or of internal phenomena by self-consciousness ; but, never thus can we have a knowledge and consciousness of the Divine Being, nor, on the other hand, by confounding the knowledge and consciousness of God with the consciousness of substantial things and of logical forms and conclusions furnished by the understanding in its discursive process of connecting phenomenal properties with substantial realities, or logical premises with real truths. These appear in the light of consciousness, as the valid results of the discursive faculty, the understanding. But by no merely discursive process,

through logical premises or phenomenal properties can we see God.

Intuitive beholding by sense and the consequent consciousness refer exclusively to finite phenomena. But God is infinite and is not phenomenal. Logical beholding by the understanding and the consequent consciousness refer to the substantial realities to which phenomenal properties are related. But God is not revealed to our consciousness as the underlying substance of phenomenal properties : *a fortiori*, we have not thus a consciousness of God.

It is only the highest faculty of the soul, the Reason, which can "reach the height of this great argument." To this, our spiritual vision alone, doth God reveal himself. As the Father of our spirits, the infinite Spirit appears to us, not comprehensible by us—known only in part, yet known so far forth as he doth reveal himself—known more and more clearly as the eye of reason is undimmed and single, till the body is filled with light.

Suppose reason wanting ; by consequence, the knowledge of God is wanting. There can be neither the rational vision nor the consciousness. So it is with the stock and the stone, so it is with the animal. It is not necessary to the purpose of our argument, as we employ it, to determine how the revealing of God to the reason is accomplished,

whether immediately or mediately, or both. The revealing of God to the reason, this is our point, the revealing of God is affirmed by the reason, and by this highest authority of the human soul we have the consequent consciousness of God, not that he appears, phenomenally, nor logically that he must be; but, rationally that he is as he doth reveal himself. This affirmation of reason perhaps involves, though it rises higher and stronger than, animal instinct which never reaches God—perhaps involves, though it rises higher and stronger than, generalizations of causal power, which, however extended, never reach him “who is before all things and by whom all things consist.” This affirmation of the reason does involve, though it rises higher than, the feeling of dependence and the impulse to worship, which witness to some outward object corresponding to the inward impulse in analogy with all the instincts of our nature, but which only feel after God if haply they may find him; higher and stronger than “the poet’s interpretation of nature” * which may “look through nature up to nature’s God,” or may idealize the universe as only “haunted forever” † by a subtle but atheistic imagining. All these may be involved as subordinate; but the rational beholding of God,

* † See British Quarterly Review.—July '71

“of whom are all things,” is man’s spiritual vision, the highest prerogative of his nature, elevating him above all that surrounds him, animate or inanimate, and exalting him to fellowship with heavenly minds, to the knowledge and communion of God. So the soul may be said to believe in God for the strongest of all reasons, because it can not do otherwise. But this statement, also, is apt to mislead, for the necessity is not blind and fatalistic, but rational and luminous. It is not a necessity which is fatalistic, for it may be resisted like all rational necessity. If the bodily eye may be closed or turned away from the sun, so may the soul wilfully turn away from God and wander into outer darkness the more perilous because the more profound. The free will may rebel and resist even to its own ruin. Those who do not like to retain God in their knowledge, he may give over to a reprobate mind that they should believe a lie.*

The ease with which all the arguments fall into their proper place, in accordance with this view, indicates that we have the clue to the labyrinth. This arrangement, while it does not attach equal value to the several arguments, does not, on the other hand, exclude any valid proofs in the line of direct argumentation. We cannot agree with those

* Rom. i. 25.—2. Thess. ii. 11.

who reject the argument from Design as worthless ; nor, yet, with those who rely upon it, to the exclusion of all other proofs. Logical arguments in their entire range, whether inductive or deductive, whether from premises furnished by moral, mental, or material facts, have their value in reference to the great conclusion, and a special adaptation to different minds. The proof furnished by the affirmations of the reason does, to some extent, reach every mind. But some minds are more or less disqualified to receive it, by internal or external circumstances, by surrounding darkness, by native grossness and earthliness, by absence or fault of education, by habit or by prejudice ; sometimes, by careless or by careful disregard, blunting the rational instincts or perverting the moral choice until the fool doth say in his heart : There is no God. To the mind unbiassed and open to its influence, this proof is at once the most clear and convincing. As such it must appear to superior and holy intelligences who behold the beauty of the Lord as they inquire in his heavenly temple. As such it must appear to the higher, purer intellects of earth, who in spirit, like Enoch, walk with God and commune with him in the temple of his material universe.

While, for ourselves, our estimate of the value of the different arguments varies, we remember that to

many, perhaps to most minds, the lower proofs are the best adapted and the most convincing.

As all human minds, whatever height of knowledge they attain, pass through the stage of weakness, so all minds have followed, to some extent, the same pathway, and somewhere in their course have mastered, or at least met with, the same early, simple means of knowing—the same early, simple proofs which have served to communicate, or to call up to consciousness the idea and the knowledge of God. The slightest phenomenon has started the soul upon the induction which ultimately leads to God. That phenomenal effect, by a necessity of experience, as well as by a necessity of thought, has a cause which has a higher, and this onward to the highest. For, the soul by its own necessity of thinking, affirms not only that every phenomenal effect must have a cause, but that there must be a primal, a highest cause. A rational necessity, no less imperative than that which bears the soul along the pathway of causality, impels to the highest unity as ultimate. This is clear to the Reason, however it may be to the Sense or the Understanding.

This is clear to the reason, else there is nothing stable, all things flow, and sense by its very confusion becomes nonsense. Hence the effort of positive scientists to find a clue which will lead to unity, and

thus make science possible and permanent : seeking for protoplasm, as a first form of life ; or evolution according to "First Principles" (physical units evolving by an inner law) ; or generative gemmules as first developing by "Natural or Sexual Selection," or by both ; or force as the rudimental originator, unfolding into a universe by conservation and correlation ; or motion as the primal source of all phenomena.

But it is vain to multiply expedients in the field of the sense. There must be a first. This is clear to the reason, else the understanding must ever plod along its weary, and still more weary way of endless regression, and the soul with hope forever deferred, sink at length in utter exhaustion. But no mind, either the simplest or the sagest, can persistently believe this. Hence the logical systems which have clamored for demonstration, and labored to prove a first. For the sense and the understanding, reason, higher than either, affirms not only that every effect must have a cause, but that there must be a first, a cause which is not an effect. Thus reason settles the vexed question for the human soul, and announces its decision to satisfy the sense, and unbind the burden from the understanding and bid it rest in the great First Cause.

If the sense-philosopher ignore reason, or rebel,

or appeal to the lower faculty, and clamor for physical sight, he shall remain forever unsatisfied, for the source of all phenomena no physical sense shall ever perceive.

If the speculative logician ignore reason, or rebel, or appeal to the lower faculty of the understanding, and clamor for demonstration of the first cause, he may plod on with increasing weariness to his dying day, for no human logic can demonstrate a first cause. Without the aid of reason, its premises are insufficient. Its major premise evermore is only that every effect has a cause. No acuteness of logic can thence infer a first cause without being guilty of an illicit process. But, reason recognized and obeyed furnishes the premises which may bear logic safely forward to the desired conclusion: (*a*) that every effect must have a cause, (*b*) that there must be a first cause, a cause which is not an effect.

And since by the very constitution of the human soul, neither the sense nor the understanding is abandoned by the reason, is ever wholly *ἄλογον*, so the obedient soul may be guided by the reason even along the phenomenal, or by the way of the logical, to the first cause, the source of all phenomena; and the sense-philosopher and the speculative logician may, by this help for the soul, be led to rest in the Supreme Cause. But this rest, though speculative,

would scarcely be spiritual; though sure, it would not be quite satisfactory; and reason offers something higher than this. Sense has observed higher phenomena than the material; for example, the internal Sense—self-consciousness—has observed thought and feeling and volition, and demands a source for these. The understanding has traced design in the mental, moral, and material world. Nature, it has discovered, is formed into an harmonious universe, where invariable as well as universal order exists. Man, also, it has observed, is fitted to such a universe. The universe, so diverse in phenomena, seems one to the observant soul; and this universe of endless and endlessly varying phenomena, seems the same to the myriad minds which observe it: the logical understanding declares it one and real, and demands the adequate cause of the order and adaptation and wisdom that pervade the mental, moral, and material universe. Strictest induction demands this—will be satisfied with nothing less. The first cause, already discovered as the source of phenomena and the origin of causes, appears in the light of Reason as intelligent and moral, as wise and free and holy; and we attain to the personality we seek. Reason affirms for faith a Divine Personality, with no less directness and authority than it affirms for Sense and for the Understanding a great First

Cause. Henceforth, for faith there exists, by the highest finite authority, a personal Jehovah. The human soul may evermore trust and worship "The king immortal, eternal, invisible, the only wise God;" may worship with stronger vision and deeper joyousness as the light of Reason is clarified and strengthened.

Henceforth, in this light it sees, with growing vision, the finite, however extended in space or time, comprehended by the infinite, who is the Author, Upholder, Governor, Finisher, who doeth all things according to the good pleasure of his will; who, in the possession of supreme wisdom, and in the exercise of supreme freedom, doth order all things at the behest and in the interest of supreme holiness. Henceforth, faith in God, (for I do not yet speak of faith in Christ the Saviour,) henceforth, faith in God is strong and secure while it follows the guidance of reason and occupies this high vantage ground, becoming weak and vulnerable only when it deserts its true guide and treads the lower ground of the understanding, or the still lower grounds of sense.

Does the Universe stretch beyond the reach of the mightiest telescope? Whatever be its utmost verge, reason no less clearly sees that it is God's universe; and faith rejoices evermore. Does the microscope reveal minute and still more minute

infusoria, multiplied indefinitely till they swarm innumerable in the dust of summer, or in autumn's haze? Still these are but the small dust in the balance of him who weigheth the mountains in scales and the hills in a balance, who taketh up the isles as a very little thing; and faith exclaims: "If I take the wings of the morning, and dwell in the uttermost parts of the sea; even there shall thy hand lead me, and thy right hand shall hold me."

Do earth's ages run backward by geologic progression into the dim distance of the past, till man and moving things disappear, and the light vanishes, and darkness settles down upon the formless deep? Reason no less clearly discerns God the Creator, having the powers of the world to come, glorious in holiness, fearful in praises, doing wonders; and faith exclaims: "Lord, thou hast been our dwelling place in all generations. Before the mountains were brought forth, or ever thou hadst formed the earth and the world, even from everlasting to everlasting thou art God." Do special creations mark the progress of the Universe? They are the acts of God. Do "physical units" appear, and, "with remarkable powers of producing and reproducing organisms," slowly or swiftly evolve a universe? They are the creations of God who hath ordained and doth direct the order of

their evolution. Do "protoplastic cells" appear, filled with life and pervaded by motion? The mighty maker, God, hath formed these "protoplastic cells," and imparted this breath of life, and intermingled life and motion. And now, if the process of development is modified by "Natural" or "Sexual Selections," or by both, it is in accordance with the divine provision. Were even "Spontaneous Generation" possible, it could not take place without the pre-requisite conditions which the Creator supplied. In a word, whatever may be the latent or visible powers in the universe, they have their source in the infinite power of the Creator, and are evermore subject to the divine control; and faith, walking serenely in the light of reason, doth rejoice in God. Thus we secure at once the retention and validity of the proofs; the logical argument or the argument from design and order, in the realm of matter and of mind—the moral argument, or the argument from conscience—the volitional argument, or the argument from free-will—the rational argument, or the argument from the affirmation of reason; and, as will hereafter appear, the scriptural argument, or argument from revelation.

We secure all this, not at the disparagement, but by the help and authority of reason. It is

competent for any man, at his discretion, to employ either or all of these, not with equal force and conclusiveness, but as he may choose, and as he best can handle them.

It were easy to elaborate and fully illustrate each proof; but this may not be, and need not. Having shown the valid ground for each, and thus rescued some, at least, from neglect and abuse, it remains for us only to state each succinctly, and arrange all in order to bear successfully upon the conclusion.

Now, the argument from design takes its proper place, and has valid force. God seen by the reason and authoritatively affirmed to be as author and finisher, a first is found, and there is room for the revealing of design; and now, every department of nature brings voluntary contributions to this accessory argument. Every science reveals fresh evidence; every power of the mind gives intelligent witness of high design. Mind and body uniting, give their combined, personal testimony. The eye, the ear, the touch—every sense furnishes accumulating proofs, in its own wonderful structure, in the perfect adaptation to sight and sound and resistance, and all the countless forms and phenomena, in things great and small, near and remote, in the material universe endlessly

varying, until the senses can not master the multiplicity, and the strongest human mind can not number them; yet so admirably adapted that they make up individual things complete, and worlds and systems, and a universe; so admirably adapted throughout, as to constitute in itself one universe; so admirably adapted to the human senses, and to the countless observant minds, as to constitute for each and for all, one universe. Such a mutual adaptation of the mind and the senses and phenomenal nature, bespeaks design which, as every wise man will admit, immeasurably transcends all earthly wisdom. Volumes might furnish some adequate room for satisfactory illustration, but our limits forbid anything beyond a brief outline of the argument.

Volumes of illustration have been written since the successful example of Paley; yet these are only the index to illustrations already exhaustless but ever increasing as science and experience are interpreting the universe. However complete, at once, the rational argument may be—the logical argument (the argument from design) is—shall forever be, cumulative.

In firm connection with the affirmations of the Reason, and the universal and immemorial fact of religious faith, and the countless evidences of wise

design in the universe far surpassing all earthly wisdom, there is the unanswerable argument from the order pervading the universe. This order is not only everywhere manifest, so that innumerable proofs of the argument press upon us; but this universal order is admitted by even the most determined atheist, who, with the desperation of an assailant, would seize this weapon of religious faith and turn it against theism. Order, universal order, he not only admits as existing, but he asserts it to be invariable and hence the basis of all induction and science. Law governs, law immutable, and thus order is secured, and thus it will forever pervade the universe, law so controlling that it can not be controlled, so enduring that it is eternal, so that it neither needs nor admits a God.

But, as we have already shown, Reason from a higher position commands this accessory argument, and covers it so completely that it can not be thus stormed and captured by the atheist, even if it had no strength for self-defence. The common consent of humanity and the argument from divine design, already established, also cover it and are ready and competent to defend it, if such defence were needed. But it is more than equal to self-defence. The assumption of the atheist is powerless against it. The atheist himself must admit the weakness of his

assumption, and after a little reflection withdraw from this point of attack. This order points to God as its author; the atheist points to chance or fate—he can point to nothing else. But who is chance, or who is fate to command the subjection and allegiance of order—of universal and invariable order? Chance is a capricious fiction without any power or wisdom or wish to produce order. Chance is nothing; and fate is blind—blind by a trick of words, but really a blind fiction, nothing more, without any power or wisdom or wish to produce order. Fate is nothing. Induction, which, for its validity and success, depends upon order in the universe, would spurn the claim of chance or fate. Induction and science repel the assumption of the atheist, and unite their testimony to intelligent design and the common consent of mankind to confirm the affirmation of Reason, that God is over all, blessed forever; that he is the same yesterday, to-day, and forever, and therefore that order is, and is all-pervading.

And now, in our line of direct proof, another accessory argument takes its proper and valid place—the argument from freedom, freedom of the will. That freedom of the will exists is proved by individual consciousness, and attested by the common consent of mankind as expressed in the language, literature, laws, and history of the world. This can

be accounted for, only on the ground that a supreme free-will presides over the universe.

Liberty, the freedom of the will, is impossible and absurd in a universe subject to fate. In the nature of the case, by the very terms of the statement, necessity must everywhere prevail in that which is chief and, *a fortiori*, in that which is subordinate. The sovereign is necessity, and the subject must be necessitated. Freedom, then, would be utterly and forever excluded from a universe subject to fate; and no less decisively would it be excluded by chance. Chance is only a name for the total absence of wisdom supreme and free, presiding over the universe. Chance is, in fact, fate only by another name. In a world where all things are subject to irrational caprice or necessity, freedom—freedom of will—is utterly impossible and absurd. Yet, such freedom exists. If anything is known, this is known—known everywhere and by every one, and by every one possessed and exercised as a birthright inalienable. Freedom exists, therefore neither fate nor chance controls the universe. Freedom exists, therefore there must be a God who, in the exercise of supreme freedom, hath created a world in which freedom is possible and beings whom he hath endowed with this exalted prerogative; and more, in the exercise of supreme freedom he doth forever

preside over the universe, so that no law or order, however long or invariably it may have operated, shall ever obtain control over the law-giver. The argument is complete in itself, and although arranged as accessory, yet, if all the other arguments were withdrawn, this alone would remain a decisive proof of a God and Governor of the universe, supreme, and supremely free.

Another important accessory argument, the last which we have room to mention—an argument closely allied to those from reason and free-will, is the argument from conscience—the moral argument. Everywhere and by every one moral obligation is recognized, and its consequent moral desert. Even the atheist applauds and condemns, rewards and blames. In every language and in every land we find this recognition, and find it always expressed in laws and religions, in approbation and disapprobation, in rewards and penalties. The law and order of society proceed on this very principle; public and private worship everywhere proceeds on this principle. The individual conscience everywhere repeats it. As sure and universal as the fact of moral freedom, is the fact of moral responsibility and desert. And were it possible for a man, anywhere or at any time, to annihilate his moral freedom, and by his own free act forever to

enslave his soul to lust and sin and Satan, conscience would forever condemn him as guilty of immeasurable folly and ill-desert; and attendant penalty would forever chastise the criminal. The individual and universal recognition of moral obligation and its consequent moral desert, is proof, universal and unvarying proof, of a Moral Governor who presides over the universe, who, with the moral freedom he hath bestowed, hath, in the interests of supreme holiness, inseparably connected moral obligation and moral desert.

The argument, then, is this: Morality (moral merit and demerit) is impossible where necessity pervades all things. Did fate or chance control the universe, moral praise and blame, reward and punishment, would necessarily be excluded as out of place. Morality would be impossible and absurd. But moral obligation and desert everywhere exist; therefore there must be a moral governor who presides over the universe, who, in the exercise of supreme wisdom and supreme freedom, doth reign in supreme holiness; who hath ordained the moral law, and, with the gift of moral freedom to all his rational creatures, hath inseparably connected moral obligation and moral desert; and faith may forever rejoice in the security of liberty and morality; more than this, faith may forever rejoice in God as Almighty,

supremely wise, and free, and holy; the author and finisher, the Alpha and Omega.

This argument, also, is complete in itself, and although arranged as accessory, yet, if all the other arguments were withdrawn, this alone would remain the decisive proof of a moral governor who presides over the universe, who is the source of the moral law, and the security, as well as the source, of morality.

Thus, both by the distinct affirmations of reason, and by strict induction guided by reason, we are led to Deity, and by their united authority we rest in God. As our line of direct argumentation began, so it ends, with the full recognition of God as a Divine Personality, supremely wise, supremely free, and holy—with whom, as the Supreme Reason, human reason may hold increasing communion—from whom we receive the exalted endowment of moral freedom—and whom, as holy, we are to worship and imitate, that we may be holy as He is holy; whose transcendent wisdom is manifest in ourselves, who are fearfully and wonderfully made, and in the earth and heavens which are full of his praises.

By these varied arguments of morality and of moral freedom, of order and of design, of universal belief and of the affirmations of reason, faith in

God is not only authorized but pronounced most rational.

Thus a place for religious faith is not only vindicated by the admissions, expressed or implied, of objectors; but a place for faith in God is established upon positive and reliable grounds.

It remains to present the scriptural argument for faith in Christ and the Gospel, together with some of the prerogatives of faith.

CHAPTER IV.

FAITH AND POSITIVISM.

The Written and the Living Word.

OUR course of discussion has led us, first, into "The Field of the Philosophic and Finite;" * secondly, into "The Field of the Religious and Infinite." †

In the former we have shown, both by indirect and direct arguments, that philosophic faith (intellectual belief) in things unseen, for example, in substance and the relation between substance and quality, in cause and the relation between cause and effect, etc., has valid ground.

In the latter we have shown, by cumulative and conclusive reasons, the validity of faith in God.

This ground already gained and securely held, we are prepared finally to consider the Revelation of God in the written and in the living Word—in the Scriptures and in Christ. Is Christian faith valid?

We have an indefeasible right, henceforth, to

* See Ch. ii.

† See Ch. iii.

assume the premise that God is. Will he reveal himself? An antecedent probability is sufficient for our argument here. But more than this has been shown in the preceding discussion. God *has* revealed himself in Creation and in Providence.

Thus we have found him, not as a logical necessity elaborated by a dialectical process, but as a divine reality. God the Father, Almighty, maker of heaven and earth—giving infallible proofs of his presence and power in making, upholding, and governing the universe. A book of high antiquity and one which will challenge our special attention in this closing discussion precisely expresses our thought: "For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead." Rom. i. 20.

"He left not himself without witness, in that he did good, and gave us rain from heaven, and fruitful seasons, filling our hearts with food and gladness." Acts xiv. 17.

Now in the sobriety of prose it speaks, and now in the rapture of poetry. "The heavens declare the glory of God; and the firmament sheweth his handy work. Day unto day uttereth speech and night unto night sheweth knowledge." Ps. xix. 1, 2.

God has thus revealed himself; he may, then,

reveal himself more fully. What shall decide? His own infinite wisdom and will. The revelation hitherto made has occurred in the ongoings of Creation and Providence, and would have been made had only material things been created and upheld, with no finite minds to recognize God's handiwork, and wonder and adore. But, now that finite minds appear, will not God reveal himself in these higher creations, and to these spiritual creatures, and through them to others? There is abundant *a priori* ground for expecting this. Indeed, we can scarcely conceive of Divine action without Divine revelation. If God has, by the very process of his action, revealed himself in the lower, the physical creation, will he not, by a nobler process of divine action, reveal himself in the higher, the spiritual creation? Mind alone can originate mind. Will not God appear more manifest, and be better understood, by the living soul which he hath made?

This book of singular wisdom, as well as antiquity, precisely states, perhaps suggests, my thought: "Let us make man in our image, after our likeness. . . . In the image of God created he him." Gen. i. 26, 27. Man stands forth in this lower world as the representative of intelligence and volition and morality, holding dominion subordinate, but representative of God's supreme dominion. Gen. i. 28.

Thus, in brief, does God reveal himself in the human soul; will he not also reveal himself to the human soul? For this the soul would long intensely, even hunger and thirst for it. Without this there would be the ceaseless cry of the human to the divine.

Until the creation of man, neither could this revelation be, nor could there be the demand for it. Will the divine Father turn away in disregard of his own spiritual children? Will not God avenge (satisfy) his own elect, his chosen ones among all the creatures on earth, that with filial yearning day and night cry unto him? He will; our better Reason replies. He will; saith the Saviour. Luke xviii. 8.

Such revelation, if it occur at all, would seem to be especially desirable and fitting in the earlier history of man until not only the eternal power and Godhead should be known, but until God be known in his moral character,—his holiness, his justice, his benevolence, his spiritual care and kindness towards his spiritual creatures; in a word, in his divine Fatherhood, holy, just, kind, yearning toward his spiritual children.

Has such a revelation been made,—a revelation corresponding to these very wants of the human soul? There is a book claiming to be a record of such revealings. The book is not a modern fabrica-

tion as an after-thought to satisfy a logical necessity, or to embody a cunningly devised theory. The book is genuine; this can not be successfully disputed. It is of the highest antiquity; this all admit. The theory is in the book itself, else it had not been thought of. The book has been wondrously preserved amid the shock and change of ages. A people, specially selected for this purpose, marvelously protected from extermination, though often conquered—from absorption, though everywhere scattered, have carried with them everywhere, and everywhere guarded this book as a sacred treasure. Early in this record, be it observed, the Divine Unity is revealed—the Divine Unity, as the basis of all true religion, as contradistinguished from polytheism, which is the parent of idolatry with its endless brood of follies and sins.

This doctrine of the Divine Unity which Socrates hailed as a great light shining from the page of Anaxagoras, (cf. *Georg.* 2, 490) this doctrine had been divinely revealed a thousand years before the time of Anaxagoras.

Beyond this fundamental doctrine, thus, and thus early revealed, the most progressive theology of modern times has realized its inability to make the least advance. This fundamental doctrine together with the religious and moral principles it

involves was not only revealed as divine truth, but promulgated as a divine law, enforced by divine sanctions, and enjoined upon men as the universal and perpetual law, thus indicating its importance in the divine estimate. Has any proficiency in morals or in theology superseded these commands of Jehovah or improved upon God's moral law? This book has been multiplied and circulated as has no other in time's whole history; translated into unnumbered tongues; made accessible to the multitude, the companion and guide both of the illiterate and the learned. Upon the best and wisest men the world has ever known, it has made the impression of a revelation from God—upon the best and wisest nations of all time it has made this impression.

If God's power and wisdom could be seen in the order and harmony of the universe, could not his moral character be expressed in the Scriptures? According to the written record, God now manifests himself to men in fuller revelations, in spiritual communings with patriarchs and priests; he speaks unto the fathers by the prophets; he proclaims a moral law for his moral subjects to guide and guard them—as he has already ordained physical laws for material things; he establishes a theocracy over a nation showing, at once and to all men, what shall be the theocracy for mind and how it shall differ from the

theocracy for matter. Sin is prohibited by the moral law, and doomed to penalty. Sacrificial propitiation is introduced. Redemption is typified and prophesied. The Church is organized; its future foretold; a Messiah predicted by whom in the last days God should more fully reveal himself unto men.

Such, in brief, is an outline of revelation in the earlier Scriptures of the Old Testament. It is addressed to man as a rational spirit. Is it Divine? Is it a revelation of God and from God? How shall we as rational, spiritual beings decide? The conclusive answer must be given by the revelation itself, involved in the very revealing. Are these evidences of the supernatural in the record? To the law and the testimony the candid inquirer will turn first, and most earnestly, and without prejudice. In nature we decided in the same way. We met with evidences of the supernatural,—order, harmony, adaptation—which matter could neither originate nor regulate; and thus we found God as appearing in the things he had made.

So, here are the evidences of God's appearing in the things revealed. We have already referred to the revelation of moral attributes and a moral law supreme in authority, supreme in excellence. We now specify some attendant characteristics befitting these moral attributes and this moral law:

There is majesty unrivalled ; majesty more exalted even than the material universe reveals ; majesty that subjects all nature to the omnipotence of God, —and this with no labor of expression, but with a repose and ease which become, and become only, the grandeur of a God and the original right of eternal possession. “ He spake and it was done. He commanded and it stood fast. He said, Let there be light, and there was light. By the Word of the Lord were the heavens made. He gave to the sea his decree. He weigheth the mountains in scales, and the hills in a balance. He taketh up the isles as a very little thing. He bringeth out the (heavenly) host by number ; because he is strong in power ; not one faileth.” The same supreme majesty pervades the attendant miracles recorded. There is also purity that is perfect ; so that highest angels veil their faces in its ineffable light, and the elect prophet declares himself undone, because, a man of unclean lips, his eyes had seen the King, the Lord of Hosts. Isa. vi. 5.

There is a marvellous consistency in the spiritual purpose and prophecy and precept and providence revealed, all of which centre in one great Messianic fact—a purpose and prophecy and precept and providence which no human ingenuity could have devised or regulated—a fact which no human wisdom could have furnished or foreseen, toward

which history was made steadily to advance, which in the fullness of time became complete, appearing then, at once, as the key to all history—the interpretation of all time, the past and the future; a consistency marvellous not alone in theory, but no less marvellous practically, providing salvation for sinners, one Saviour for all mankind; announcing the brotherhood of man, whose nature a divine being should take upon himself that he might reach and rescue the lost. Attending the divine redemption is a promised ideal of perfect excellence, rising up amid but above all humanity, inviting and helping to a higher even a holy life, reminding the soul of its infinite value, promising a better future even the heavenly, and pointing to a progress illimitable, even “the measure of the stature of the fullness of Christ.”

In all this revealing of purpose, and prophecy, and precept, and providence, and propitiation, the supernatural everywhere appears. The promised Messiah is supernatural, God incarnate, man divine; to be made sin for us, yet holy, harmless, undefiled; dying for sin, yet separate from sinners. The predicted redemption is supernatural, saving the people not in but from their sins, thus redeeming humanity. The agency foretold is supernatural. It is the Holy Ghost which should reason of sin and

righteousness and judgment, and regenerate the soul.

The Kingdom to be established is supernatural,—the Kingdom of God diffusing righteousness and peace and joy in the Holy Ghost. The promises are exceeding great and precious, such as no human thought could conceive; but what is especially significant is, that they involve a condition unheard and unthought-of till announced in the revelation,—purity of character in the recipients, wherein they become partakers of the divine nature. And the future revealed is supernatural, in which the purity, the promise, the kingdom, shall culminate in a new heaven and a new earth, in which dwelleth righteousness. Even after the revelation it requires the most careful discrimination to repeat the statement without confusing or humanizing the divine ideal, *e. g.*, in regard to God's spiritual perfections, or Christ's complex nature, or the ministration of the Spirit, or the purity of the divine promises, or the perfection of the kingdom of God. This characteristic of revelation grows upon the human soul as it becomes more intelligent and more studious of the Scriptures.

All this divine presence is revealed as pervading and interfusing human history, continuous and controlling, yet consistent, producing no discord nor

disorder; but, on the contrary, reconciling the world unto God, and so not only involving harmony in the plan, but, in its onworking, diffusing spiritual harmony. The wonder grows with our increasing knowledge; and unlike acquaintance with the uninspired, the human, here familiarity leads to adoration.

The study of revelation culminates in worship; "Blessed art thou, O Lord; teach me thy statutes. Thy word have I hid in mine heart, that I might not sin against thee."

The human reason bows before this divine revealing with profounder reverence than any marvel or miracle addressed to the physical sense could possibly produce. It is God appearing in the penetrating power of his Word, as to Elijah, not in the tempest nor the earthquake nor the fire, but in the still small voice, when the prophet wrapped his face in his mantle.

If mere reasoning attempt an explanation of this revelation as uninspired, the wonder becomes inexplicable. But human reason discerns a revealing of the divine reason, and thus the mystery becomes a revelation.

To recapitulate: this revelation claims to be divine. Can we conceive of nobler attributes? Justice, truth, holiness, benevolence. Do we, elsewhere, find anything surpassing this revelation? In all

succeeding ages has highest human wit or wisdom originated or demanded anything worthier of divinity? Men of most exalted genius, in their loftiest, boldest statements of the divine character, have resorted to the Scripture vocabulary. If divinity is not revealed here, how could it be revealed in any written word? What shall decide? Does it satisfy the highest demand of reason? Then reason decides that there is a revelation of God in the written Word. What if some have not believed? Shall the unbelief of some make the truth of God of none effect? This unbelief of written revelation has its parallel in the unbelief of natural revelation. Though, according to our preceding argument, in the language of Paul: "The invisible things of God from the creation of the world are clearly seen, being understood by the things that are made, even his eternal power and Godhead; so that they are without excuse," yet there have been those who have not believed—determined atheists, notwithstanding the cumulative testimony of nature and the general belief of mankind.

By this line of internal evidence, then, we are led to the inevitable conclusion, that the written record has inherent, infallible proofs of a divine revelation.

But there may be external evidence also. In-

ternal there must be, for this is essential to satisfy the reason. The external can only be corroborative; for no amount of external evidence can vindicate as divine, a revelation of folly, absurdity, and sin. At the same time, it seems most fitting that such a revelation come with attendant external evidences, corresponding to the supernatural character of the revelation. Precisely this is the recorded statement. The revelation is not primarily of power, ubiquity, intelligence, as in the physical world; but, as we have just seen, of holiness, justice, truth, benevolence, presenting a divine personality, revealing to the human spirit a divine spirit infinite in wisdom and in goodness, "proclaiming the Lord God, merciful and gracious, long-suffering, and abundant in goodness and truth." Exod. xxxiv. 6. With this internal evidence there are corresponding external evidences of supernatural revealing: (Exod. xix. 16-19, *et al.*) miraculous control over the forces of nature as at Sinai and Horeb, the Red Sea and the Wilderness, Jordan and Canaan, showing that the forces of nature are subject to the divine control and subservient to the divine purpose in the higher, spiritual revealings of God.

Such a revelation, if desirable for man, must, for the same reason, be continuously repeated, or be written for preservation and transmission, that the

human race may know the mind and motive and will of God.

Shall the revelation be continuous, or written? It is both—continuous, till the time of its completion; and written, for the ages to come.

But up to this point, the revelation of God and of the divine plan is by no means complete. If it be made complete, this must be in the fullness of time. Until then, mankind must desire and wait for it. Completeness will supplement the Old with the New—the Written with the Living Word.

Deferring the consideration of this for a little, we pause to notice an objection, the objection of the rationalist, that we have human reason to decide what the divine revelation shall be, and thus annul the value and the necessity of a written revelation.

We reply that we have reason to decide, not what the revelation shall be, but, as Coleridge puts it, "what it shall not be;" that it shall not be a revelation of folly, absurdity, and sin.

Hume, pressing an objection from an opposite direction, concludes his essay on miracles with this disingenuous sneer: "Our most holy religion is founded on faith, not on reason; mere reason is insufficient to convince us of its veracity."

To this skeptical objection we reply, that our initial work has been in the light of reason to find

God as he has revealed himself in the material and mental universe.

With Theism thus securely established, faith in God reposes upon rational and valid ground. Thus, at the very outset, the objection of Hume is more than answered, it is denied and ruled out of the discussion.

After this initial work we proceed, in the light of Reason, seriously to examine the evidences of Divine Revelation in the written word to which we are earnestly invited by the Scriptures themselves. As Reason has already found in Theism a valid basis for Revealed Religion, so Revelation makes its appeal to Reason and commends itself to the rational soul. This is the uniform tenor of Scripture, as well as the explicit invitation of its Divine Author. The Holy Ghost reasons with men; and the apostolic injunction is: "Be ready always to give an answer to every man that asketh you a reason of the hope that is in you." 1 Pet. iii. 15. Not only at the outset, then, is Hume's objection ruled out of the discussion; it is all along and forever excluded. Revelation instead of doing violence or discredit to Reason is addressed directly to the rational nature of man. Revelation everywhere assumes the existence of a moral sense—a Reason and Conscience—in man, and thus it ever addresses him. Did Chris-

tianity vindicate itself by the false process of Hume, then would faith deserve the supercilious sneer of this arch skeptic. For, as it has been justly said: "If there be no truth set before the faith it may become the weakest credulity." (McCosh).

There is then a proper limit to be observed in either direction, toward the atheistic objection, and toward the rationalistic; on the one hand, preserving Christian faith from sinking into senseless superstition; on the other hand, from vaulting into arrogant censorship. Sin is in the world. The consciousness of it is confessed by the individual soul. Its prevalence oppresses humanity. History bears witness to its universal presence. How shall sin be treated? In the method of justice or of grace? Of penalty or of pardon? If of penalty, to what extent? If of pardon, upon what ground and condition? If an administration of grace be adopted, how shall it be made to harmonize with justice? If there be propitiation, what shall be the sacrifice? If there be mediation, who shall be the mediator?

To whose hands shall the administration of grace be committed? Shall this gracious administration continue forever? If not, when shall it end and how? If there has been temptation shall grace reach the tempted only, or the tempter also?

These, and the like, are unavoidable questions

which human reason must ask in the interests of the human soul and of the divine government, but is incompetent to answer. These questions more than refute the objection of the rationalist. They demonstrate the urgent necessity of a completed revelation to a world of sinners. They indicate, also, the possible, if not the necessary revelation of a Saviour and by a Saviour; and they suggest the necessity of satisfactory evidences attending such a revelation; evidences the more requisite and satisfactory because of the important issues involved, even salvation for sinners and the integrity of the divine government.

By this very statement three representative objections are at once met and refuted; the rationalistic objection of Parker and others, refuted by the need of a revelation; the atheistic objection of Hume and others, refuted by the evidences to be canvassed; the mythical objection of Strauss and others, refuted by the reality required,—a salvation and a Saviour, a real Redeemer and a real redemption. A brief unfolding of this statement must conclude this chapter.

What is the revelation? It is of grace rather than of justice; by propitiation rather than by penalty; through a Saviour for sinners rather than by a sentence of execution; for the tempted but not for the tempter; on one condition, repentance

toward God and faith in the Lord Jesus Christ. The Saviour is the son of God and son of man, divinely begotten but humanly born, thus wonderfully qualified for the work of mediation. Into the hands of this one Mediator all things are now ordained. He must reign till he hath put all things under his feet, destroying sin and death the last enemy, and him that hath the power of death, thus bringing in everlasting righteousness, when the administration of grace shall be complete and the kingdom be given up unto God, even the Father, that God may be all in all. (Cor. xv, 25, *et seq.*)

Thus the new revelation is of and by a Person combining in himself all typical and verbal revealings; in whom dwelleth all the fullness of the Godhead bodily. (Col. ii. 9.)

The new revelation is of a person and a life that is at once divine and human, actualizing before men the doctrines of theology—God manifest in the flesh, so that Jesus replied to Philip: “He that hath seen me, hath seen the Father;” and John declared: “The life was manifested, and we have seen it, and bear witness, and shew unto you that eternal life which was with the Father, and was manifested unto us.”
1 John i. 2. This is a revelation of the substance hitherto foreshadowed, of types realized, of prophecies fulfilled, of sacrifices ended by a propitiation

offered once for all, attended by evidences both human and divine, internal and external, character and conduct, life and teaching, works and words, in trial and triumph from the lowly, lonely birth at Bethlehem to the ascension from Olivet in the presence of all the disciples when, as he blessed them, he was taken up and a cloud received him out of their sight.

This person, this character, this life and teaching and work, revealing God, redeeming the sinner, reconciling God and man—this stands forth before the world as unique and divine, challenging and securing faith and devotion.

The revelation, then, is by no means complete without the coming of a Redeemer consummating in himself the mystery and the manifestation of godliness. (1 Tim. iii. 16.)

Until this revelation came, no questions could be so momentous to the human soul as those involved in his appearing, no knowledge could be so important to gain; and now that the revelation is made, no knowledge is so important to retain and apply.

It might have been justly expected that the divine Law-giver would maintain the law. But how? By penalty? If thus, what would be the doom of the transgressor? And what would be the future relation and conduct of God toward the

sinner? No finite reason could tell what God should do, although it could be readily and safely affirmed that the Divine Reason would do nothing irrational; and highest human reason in this universal emergency of condemnation, could only wait for the divine revelation. And is not the announcement full of the supernatural? The revelation self-evidenced as divine? "Thou hast destroyed thyself, but in me there is hope." "I have found a ransom." "His arm brought salvation." God reveals himself as just, and yet "the justifier of the ungodly." Rom. iv. 5.

This is a new and wondrous revelation of God, no less merciful than just. The wonder grows with every new revealing. Who is this Ransom, human reason reverently inquires. The answer is from the highest heaven: "Lo, I come," saith the Saviour. "In the volume of the book it is written of me. Sacrifice and offering thou wouldest not, but a body hast thou prepared me." Heb. x. 5, 7. In the revelation as it rises to completeness, Christ and redemption are central. Around these, prophecies and promises circle; and to them, unerringly point. The character and coming of Immanuel, his incarnation, his work, his human sympathy and suffering, the death which he should accomplish at Jerusalem that he might deliver man and destroy the works of

the devil—these revelations fill the vision of seers; make up the burden of prophecy; give heavenly rapture to the Songs of David; inspire Isaiah to prophesy, "Prepare ye the way of the Lord:" and Malachi to give the nearer prediction, "Behold, I will send my messenger, and he shall prepare the way before me; and the Lord whom ye seek shall suddenly come to his temple;" and him that was more than a prophet, even John the harbinger, to repeat the prophecy as fulfilled, "Behold the Lamb of God which taketh away the sin of the world.' Inspired apostles take up the heavenly theme, repeating evermore the name that is above every name, until in the apocalyptic vision Jesus again appears as the alpha and omega, the beginning and the ending, the first and the last; and with the revelation completed is heard the echo of the new song in heaven: "Unto him that loved us, and washed us from our sins in his own blood, and hath made us kings and priests unto God and his Father; to him be glory and dominion forever and ever." Rev. i. 5, 6.

Along this line of divine revealing it were rational to expect that attendant miracles would gather. That they multiply in number and in significance would not surprise us, but would rather comport with the greatness of the revealing and thus the

better satisfy our rational expectation. And this accords precisely with the record. These are the external credentials of the revelation, corroborating the internal evidences. They are the works of Christ. He maketh the dumb to speak, the deaf to hear, the blind to see, the lame to walk; he heals the leprous; restores the paralytic; walks upon the sea; calms the winds and the waves; multiplies the five loaves to feed the hungry thousands; casts out devils; raises the dead; and, higher still, forgives sin; transforms moral character; binds sinners to himself in bonds of everlasting love, making them his disciples and apostles; breathes upon them the Holy Ghost; inspires them for a divine mission preaching Christ and him crucified with signs following.

This general survey, which involves so many convincing particulars, might easily be made specific. And now, to a candid scrutiny of this Revelation concerning Christ from the first intimations in Eden, the promises to Abraham and Isaac and Jacob, the speaking in times past unto the fathers by the prophets, the Old Testament of sacrifice and atonement sealed with blood as typical until the types are realized and the prophecies fulfilled in Christ—to the candid mind is there not manifest a comprehensive, consistent, wonderful plan more and more fully revealing God to man until it culminates

according to prophecy and promise in the Incarnation—"God manifest in the flesh, justified in the spirit, seen of angels, preached unto the Gentiles, believed on in the world, received up into glory?" 1 Tim. iii. 16.

Such is the written Word of Revelation, and such, the living Word. Is this living Word a revealing of God? In what way could God reveal himself to men more fully? How otherwise could the Divine be brought into such near communion with men? What divine trait can human reason conceive which is not revealed in Christ? When has divine excellence been so exalted? How could holiness receive a higher exemplification? Christ was without sin. How could divine justice receive superior vindication? Christ came not to destroy, but to fulfill the law—every jot and tittle. How else could the mercy of God be made so conspicuous? "Grace and truth came by Jesus Christ." "He was full of grace and truth." "Where sin abounded, grace did much more abound." In him is revealed "the exceeding riches" of divine grace. And the love of God is commended unto us in that "While we were yet sinners, Christ died for us." This thought is capable of indefinite expansion, but I may not pursue it here.

In this Revelation, "Mercy and truth are met

together ; righteousness and peace have kissed each other ”

“Nor dare a creature guess
Which of the glories brighter shines
The justice or the grace.”

The two-fold method of argument,—the direct and the indirect—is applicable in this as in the preceding chapters. The indirect argument is cumulative with the admissions of objectors, such as Rousseau and Renan and Strauss and Parker, both to the supreme excellence of Scripture and the matchless merit of Jesus ; and the reply of Lessing to the neologists is more than an admission—it is a refutation, as well as an argument.

But these we need not stop to particularize. Nor need we extend the direct argument by dwelling upon the doctrines of the Gospel. These doctrines are but the outgrowth of the Christian principle, the systematizing of the revelations of Christ, to be preserved in the divine record for universal reference. So that henceforth, as both fact and precept it may be said : Search the Scriptures ; they are they which testify of Christ. So that henceforth in the ministration of the Spirit, He shall take of the things of Christ and shew them unto men. And in the highest office which he performs, he doth fulfill the Saviour’s prayer : “ Sanctify them through thy truth ; thy word is truth.”

The Scriptures are their own best interpreter. He is the wisest expounder who best compares things spiritual with spiritual.

The doctrines of the gospel, then, constitute the doctrine of Christ. The holy Scriptures are the repository divinely appointed. To perpetuate the Gospel of Christ and teach it to all nations, the Scriptures are necessary. De Quincy has well said : "No book, no doctrine. No doctrine, no book."

Words of intense significance conclude the revelation from God : "If any man shall add unto these things, God shall add unto him the plagues that are written in this book ; and if any man shall take away from the words of the book of this prophecy, God shall take away his part out of the book of life, and out of the holy city, and from the things which are written in this book." Rev. xxii. 18, 19.

The revelation in the written and the living Word has an historic reality on which faith may securely rest ; a divine personality with which faith may commune ; a spiritual life which faith may share ; a divine doctrine which faith may practice and proclaim ; a gospel of salvation which faith may preach to every creature with the abiding pledge of Christ's presence and power.

We have now reached a valid ground for faith in its highest exercise,—saving trust in the Redeemer.

There is not only faith in God, as he is seen in nature, in providence, in scripture, and by which he is known so far forth; but faith in Christ as the revealer of God and the reconciler of men, the express image of the one, the Saviour of the other, the mediator between God and man. And "This" saith the Saviour, "is life eternal, that they might know thee the only true God, and Jesus Christ whom thou hast sent." Every step of our advance has been upon valid ground, until we have legitimately and securely reached this climax of faith—which bringeth salvation

In securing this result as a personal experience, it is to be especially remembered that the Holy Spirit effectually contributes: taking of the things of Christ and showing them unto men. Reasoning of sin and righteousness and judgment, quickening the moral powers to a new life,—a life of faith upon the Son of God.

A new experience is the steady spiritual outgrowth of this new life of faith. This experience is to the soul an earnest of eternal fruition, and a spiritual support and defence, invincible by any form of skeptical or vain philosophy—more than this, a defence and support unassailable by any foe. To the doubting, the hostile, the curious, the candid inquirer, the reply of Christian experience is: We have found the Messiah. Come and see.

This individual (inner) witness is corroborated and confirmed by the ministration of the Spirit in perpetuating the reign of Christ and extending it, not through force, but through faith working by love. Christianity vindicates itself by its power over the individual soul and over society, purifying and redeeming the one, civilizing and exalting the other.

Prophecy, too, is a standing external witness, as in the case of the dispersion of the Jews for 1800 years, and onward to their final ingathering, when the fullness of the Gentiles be come in, Rom. xi., whose dispersion shall be the reconciling of the world, and whose receiving shall be life from the dead.

So, universal human history shall contribute with myriad voices to verify the divine revelation. Then shall it appear to every creature that the Lion of the tribe of Judah, the Root of David, hath prevailed to unseal and open the book of the Divine plan and Providence ; and, by his redemptive work as the Lamb that was slain, "is worthy to receive power and riches, and wisdom, and strength, and honor, and glory, and blessing," Rev. v. 12.

If now it be demanded, Can human Reason fully comprehend Christianity? Faith replies: No, it is a life, not a philosophy of life. Can it be proved? Faith as readily replies: Yes, by divine testimony

and by Christian experience. How shall we know it as a reality? The answer is: By trying it. No test can be more simple, or can more readily commend itself to human reason. The answer evermore is and can be no otherwise: "If ye do his will ye shall know of the doctrine." No one has applied this test according to the direction of faith and given testimony against the Gospel.

The soul fully satisfied that God has given a Revelation in the written and the living Word—in the Scriptures and in Christ—Faith, henceforth, assumes its legitimate prerogative. With the consent of reason it looks beyond human reason to a higher, even a divine guide. It believes in God, and believes also in Christ. Having rationally received Christ as divine, we believe that he is competent to instruct our ignorance; and believing in his complete veracity, we accept all that he may reveal although we are unable to comprehend all that he may say. He may speak in grace as freely or unexpectedly or marvellously as in nature. Who shall dictate to God in the creation and control of worlds or of atoms? Who shall dictate the revelation or the riches of divine grace?

The Scientist, with philosophic faith, acts as the interpreter of nature; the Christian, with Evangelical faith, acts as the minister of grace.

Now, it is easy by faith to understand that the worlds were framed by the Word of God.

Now, in the superior light of Revelation, it is rational and easy to look not at the things which are seen and temporal, but at the things unseen and eternal. Now, in this superior light which reason recognizes as divine, it seems not only desirable, but clear to faith that God should establish his kingdom among men;—a kingdom that is not meat and drink, but righteousness and peace and joy in the Holy Ghost—a spiritual kingdom.

In order to this, it seems to faith consistent that material interests be made subordinate and subservient to the spiritual; and so, that all be ordained in the hands of the Mediator, and that this gracious work of renovation and purification and exaltation be effected by the ministration of the Spirit, the only competent agency. Henceforth, faith becomes to the human soul the substance of things hoped for, the evidence of things not seen. The soul is justified by faith in Christ who is made unto us wisdom and righteousness and sanctification and redemption. Thus we rise to a new spiritual life of communion with God through our Lord Jesus Christ; so that henceforth we live—in the truest, highest, best sense—we live by faith. This is not abstract or mythical, but rational and simple, commended to human rea-

son in the light of infinite reason. Henceforth, we walk by faith as seeing God who is invisible, and have the testimony that we please God—for, at this stage of our advance, even finite reason is competent to affirm, (what revelation declares) that without faith it is impossible to please God. At every progressive step we rise higher and higher into spiritual life and spiritual communion with him who is the fountain of life and of light. Henceforth, faith works by love, combining graces in one spiritual character which becomes more excellent as the combination of graces becomes more comprehensive: "Until we all come in the unity of the faith and of the knowledge of the Son of God, unto a perfect man." Eph. iv. 13.

Now, whether faith be set forth prominently by Paul, or love by John, or hope by Peter, or works by James, it is to the believer only the clearer unfolding of graces which are really inseparable. To the view of faith, variety in revelation harmonizes in a higher unity like the separate colors of the rainbow blending in the clear light of day. It is then the prerogative of faith to illumine, to guide, to stimulate the soul. "Paganism," as De Quincy has justly said, "Paganism aimed at no distant prize ahead; it fled from a danger immediately behind."

This is equally true of rationalistic infidelity and atheistic materialism.

In the darkness which surrounds them, they are confronted evermore by despair, by which, though resisted again and again, they must at length be overborne. The spirit of the times, so far forth as divorced from Christ, is one of spiritual unrest and despair.

This appears in literature and science, as well as in morals and religion. But faith, saving faith in Christ, gives rest—the rest of a liberated soul—a rest at once intellectual (for they that do his will know of the doctrine) and spiritual—repose in God as a Father, in Christ as a Saviour, in the Holy Ghost as a purifier, in the Scriptures as the word of truth making wise unto salvation. They which have believed do enter into rest.

In its complete exercise, then, as saving trust in the Redeemer faith assumes exalted prerogative. It commends to the human reason the highest guide, even the divine; the loftiest motives, even those that are infinite and eternal; an infallible rule for belief and life, even the inspired Scriptures; an Almighty Saviour, even Jesus; an unfailing witness, companion and comforter, even the Holy Ghost. By rightful prerogative higher than the human it secures for man all the blessings of salvation, and

from man humble and hearty obedience. It prompts to this obedience by presenting a faultless model, even the perfect Christ, tempted in all points like as we are, yet without sin, leaving us an example that we should follow his steps; a divine friend whom it behooved to be made like unto his brethren that he might be a merciful and faithful high priest; stooping to our low estate that he might redeem us from the curse of the law and lift us with himself to the throne of his divine majesty; encouraging us to overcome and sit with him in his throne, as he also overcame and is set down with the Father in his throne. Rev. iii. 21.

In the light of revelation, faith evermore cheers the soul with divine promise, begetting patience in sorrow, waiting for God—strength in weakness, resting on God—courage in danger, trusting in God—diligence in business, serving the Lord—peace, victory even in death, through our Lord Jesus Christ.

CHAPTER V.

ADMISSIONS OF PHILOSOPHICAL SCEPTICISM.

PHILOSOPHICAL scepticism, not content with occupying the neutral ground of doubt, prefers to be polemic. Studiously avoiding the defensive, it adopts an aggressive policy. Affecting the hauteur of positivism, it boasts that along its march lie tattered creeds and theologians slain. By this dialectic legerdemain it has been wont to divert critical attention from itself, and impose the burden of proof upon Christian theism.

Christianity has never shirked the burden of proof. The Master assumed it, as a divine Teacher pointing to divine credentials, saying: "Go and show John again those things which ye do hear and see: The blind receive their sight, and the lame walk, the lepers are cleansed, and the deaf hear, the dead are raised up, and the poor have the gospel preached to them" (Matt. xi. 4, 5). "The works that I do in my Father's name, they bear witness of me" (John x. 25). "If I do not the works

of my Father, believe me not. But if I do, though ye believe not me, believe the works" (John x. 37, 38).

The apostles, as they proclaimed the gospel of Christ, accepted the burden of proof. Peter declares: "We have not followed cunningly devised fables, but were eye-witnesses of his majesty. . . . The voice which came from heaven we heard when we were with him in the holy mount" (2 Pet. i. 16, 17, 18). "We speak that we do know, and testify that we have seen" (John iii. 11). And they charged the disciples, "Be ready always to give an answer to every man that asketh you a reason of the hope that is in you" (1 Pet. iii. 15).

But while Christianity, in the spirit of the Master, is always ready to take the burden of proof, and frankly answer the inquiries of every candid mind, it has a logical and a moral right, after eighteen hundred years of recognition by the best and the most intelligent individuals and nations—it has a right to claim the presumption in its favor, to challenge the strength of its modern adversary, and put philosophic scepticism upon the defensive. The inevitable reply to this challenge is the acknowledged inability to prove that there is no God. This acknowledgment, however reluctant, is universal. The attempt, persistent and repeated, has

issued not in demonstration, but in denial, supported evermore by negative premises, like the assertion of La Place, that no God could be seen within the range of his telescope. But, as every logician knows, negative premises prove nothing. The telescope of La Place could not survey the universe ; and if it could, yet would it discern only material bodies, which appear in space. God is not such a being. The telescope of La Place could not detect the mind even of its maker, much less of Him who created the heavens and the earth. Neither the telescope nor the microscope can detect mind and thought. Such denials are only *argumenta ad ignorantiam*. This first admission of philosophical scepticism is fundamental, and reveals its essential weakness, and yields to theism a matchless advantage both for attack and for defence.

But the admission is not exhausted with this statement. The very attempt to prove that there is no God has been rebuked by the school of sceptics as unauthorized and rash. The latest attempt of this kind, that of the intrepid Dr. Büchner, is referred to by the Westminster Review (Oct. 1872) in the following words of friendly, but significant warning : “ Dr. Büchner seems to overstep the limits of scientific argument, in that he endeavors to prove the Unknowable [Herbert Spencer’s nomenclature]

to be untrue—a position which seems, on the face of it, to be self-contradictory.”

Here, not for the sake of the argument, but to relieve the mind of some unfledged sceptic who may deem this warning gratuitous, it may be mentioned that Mr. Spencer affirms the existence of the infinite, the unknowable, as source of all that is. “The ultimate religious truth of the highest possible certainty” is “that the power which the universe manifests to us is utterly inscrutable.”* And again: “Appearance [manifestation] without reality is unthinkable.”† Therefore “the inscrutable power” is “a reality”; and still again, according to Mr. Spencer, “to say that we can not know the absolute [or inscrutable power] is, by implication, to affirm that there is an absolute,”‡ and more to the same effect.

Mr. Darwin declares: “The question whether there exists a Creator and Ruler of the universe has been answered in the affirmative by the highest intellects that have ever lived.” Again he says: “An omniscient Creator must have foreseen every consequence which results from the law imposed by him”; and again, referring to natural laws: “An omnipotent and omniscient Creator ordains everything and foresees everything.”§

* First Principles, p. 46. † p. 88. ‡ p. 91.

§ Animals and Plants under Domestication, Vol. ii. p. 431.

Sir John Lubbock, speaking of "The Origin of Civilization and the Primitive Condition of Man," says: "The whole exhibits one grand scheme of progression, . . . having for its object the continual manifestation of the design, the power, the wisdom, the goodness of Almighty God." Thomas Paine inserts in his creed: "I believe in one God, and no more, and I hope for happiness beyond this life." * "The Journal of Speculative Philosophy" (William Harris of St. Louis, editor), the modern representative of the Hegelian school in America, vindicates Hegel against the charge of irreligion, "Not only in not denying God, freedom, and immortality—the three cardinal points of religious faith—but in affirming them as the highest consequences of his speculations, rejecting atheism and pantheism in the clearest words." And, not to extend this line of admission, "the new philosophy," in its newest drift, † admits—asserts—"an almighty will, whose very life is idea, whose action produces time and all its facts and phenomena . . . an unconscious will and idea which called all creatures into being." His system, like that of his master, Schopenhauer, "starts from a positive idea of the spirituality, and also impersonality, of an overruling

* See Frothingham's "Beliefs of Unbelievers."

† Hartmann's Philosophy of the Unconscious.

power—a will ruling over all nature and life,” and rejects with contempt the gross hypothesis which would make matter originant, and reduce all things to materialism.

This primary admission of philosophical scepticism, we repeat, is fundamental, and at once casts suspicion upon the whole sceptical superstructure.

Closely related to this is another admission, viz., the inherent weakness of philosophical scepticism. Speaking of physical science, Professor Tyndall says: “The logical feebleness of science is not sufficiently borne in mind.”* And again: “We know not the connection between the body and mind.”† As Mivart has forcibly said, “Physical science, as such, has nothing to do with the soul of man, which is hyperphysical,”‡ *a fortiori*, we say, it has nothing to do, as such, with God who is a Spirit, who is before all things, and by whom all things consist. It can not reach to the question of the supernatural, the question at issue. “The supernatural is not to be expected or looked for in the sphere of mere nature.”§ “No investigation of natural laws can show the conception of the divine action to be false.” “Physical science can have

* Pall Mall Gazette, June 15, 1868.

† Eclectic Magazine, p. 380, 1869.

‡ p. 303. § p. 284.

nothing whatever to do with absolute or primary creation." This point is well stated by Baden Powell: "Science demonstrates incessant past changes, and dimly points to yet earlier links in a more vast series of developments of material existence; but the idea of a beginning, or of creation in the sense of original operation of divine volition to constitute nature and matter, is beyond the province of physical philosophy."* Mr. Darwin says: "Our ignorance of the laws of variation is profound."†

Comte proclaimed that philosophy must be positive, that is, leave no unknowable behind it, thus directly contradicting Herbert Spencer. But if philosophy ought to be so, it can not be so on Comte's plan—the plan of mere experience; for no experience can affirm with certainty that behind the phenomenal there is, or is not, an unknown reality. For philosophical scepticism to deny or ridicule, on physical grounds, the doctrine of divine existence were as illogical as for the blind man to deny the existence of the sun. Had this admission not been made by Tyndall and others, it were no less obvious; for positive science in its very nature involves it. Positive science instructs us to advance only so far as we know. Mr. Mill, its most precise

* *Philosophy of Creation*, Essay iii. Sec. 4, p. 480.

† *Origin of Species*, Summary of chap. v.

and profound exponent, declares that we know only phenomena; that these have no real bond of connection; that they are only associated by the knowing soul as antecedent and sequent; that the soul itself is only a series of feelings with no more real bond of connection than belongs to the external phenomena—mere antecedence and sequence; that by such an unreliable association, which such an unreliable soul has exalted into an unreliable law of unreliable induction, we know for all things phenomenal their phenomenal law may change on this phenomenal planet. Even the phenomenal soul may undergo a like complete change in its phenomenal law of knowing, so that even here what seems to be, and to be a law, may not be, or may be reversed; so that two and two shall make five in mathematics, two straight lines may inclose a figure in space, intelligence become folly in mind, and right become wrong in morals, and why not, with the utmost precision of Mr. Mill's logic, a God not appearing be at the next moment a God appearing? Or, to put it on the negative side more strongly than Mr. Mill could by his phenomenal system, a God impossible be a God possible! And if for this world this is the logical and inevitable resultant of positivism, in the prudent and precise interpretation of its ablest exponent, *a fortiori*

it may be for other worlds. By the very constitution of its system positivism deprives itself of the possibility of making any, the least, positive denial of the question at issue; and, further still, its principles (if they deserve the name) are subversive even of positive science. Its fundamental premise—while it is all that mere sensation can furnish, is, in the light of reason, positively unstable and self-destructive. “All things flow,” said the old Ionic positivists; but these modern positivists assert that there is nothing but the flow, and that is only a “possibility for sensation,” and therefore may not be what it seems; the very consciousness in which the seeming “flow” appears is only a flow, and may not be what it seems; and the soul itself is a flow of flowing feelings. So that things are only phenomenal; consciousness is only phenomenal; the soul is only phenomenal. There is nothing but the flow, and that may not be what it seems; indeed, it may not be at all.

Can such a fundamental premise be other than self-destructive? Can such principles be other than subversive of “positive science”? Is not such a system (we repeat) by its very constitution forever deprived of the possibility of making any, the least, positive denial of the issue involved in this discussion? Besides, how reliable can be an induction based upon

such a shifting ground? We wonder not that when the possible sensation reached Mr. Mill's "series of feelings" (for soul) that his fundamental premise was silently stealing away, the despairing admission escaped his lips: "Faith in induction is of slow growth." Alas! the utter imbecility and nescience of positivism! Weaker than a broken reed to lean upon, it is at best, and only, a seeming reed—"Only this, and nothing more." Its appropriate description would be a philosophic parody on Poe's "Song of the Raven." Is such a system a thing to be proud of? Does it offer a fitting license for dogmatism? Above all, does it authorize its votaries to indulge in defiance and insult toward faith in God, the faith of our age, the faith of all the ages? If mere antecedence and sequence make up all there is in causality, then science is a mere seeming, the absurd assertion that Tenterden steeple is the cause of Sudbury downs should satisfy the author of Mill's Logic, and the reasoning of the peasant should take rank with that of the philosopher.*

But the admission does not exhaust itself with this statement. Still more is implied in the failure to array science against Christian theism. In almost every case—astronomy, geology, comparative philology, etc.—the attempt has been made, and

* Mill's Logic, i.

the pre-judged opposition trumpeted. But uniformly has time compelled the admission that true science is not hostile to true religion. Indeed, since the time of Bacon, science has been the strong and sure ally of religious faith; stronger and surer as it has grown mature. Astronomy has enlarged and established the illustrations of eternal power and wisdom, until, as never before, the heavens have declared to man the glory of God, and the firmament has showed his handiwork. “*Elegantissima hæc compages solis, planetarum, et cometarum (et stellarum), non nisi consilio et dominio. Entis cujusdam potentis et intelligentis oriri potuit.*”* Although celestial bodies moving through the depths of illimitable space have not all regarded the scientific dictate of La Place, † that all generated motion must lie in the same direction, yet they have implicitly regarded a higher law and Lawgiver; so that the satellite of Neptune, or of Uranus, however opposite its direction, has not disturbed the harmony of celestial motion. Suns and satellites now, as when Newton wrote or David sung or Isaiah prophesied, declare the glory of him “who bringeth out their host by number; who calleth them all by names by the greatness of his might, for that he is strong in

* Newton's *Principia*.

† *Système du Monde*, Livre iv. chap. 2, p. 226.

power ; not one faileth ' (Isa. xl. 26). The prevalence and fitness of one simple but efficient law,—the law of gravitation—has been inductively traced, until, not by demonstration, but by progressive approach, it has been declared and believed to be universal ; as if the universe were in fact one—bound to one centre by one law ordained by one supreme Creator.

Geology has not only illustrated, but well-nigh demonstrated, tenets of religious faith held for ages as most exalted and far-reaching. In all this array of scientific witness for religious faith there has been no speech, no language. No voice has been heard ; but the words (the expression) have gone forth through all the earth and to the end of the world.

But another scientific witness has recently offered its testimony for religious faith through speech, in language and with a voice coming up from all the earth,—the science of comparative philology. All through the Aryan family, as it has spread over Europe and over India from its Asiatic centre more than five thousand years ago, religious faith has been invariably and universally entertained and expressed, repeated and recorded in living words. In the Shemitic language, Jehovah God has been the sacred name supreme, borne everywhere most piously by every member of the whole Shemitic family whether

Chaldean, Mohammedan, or Jew, whether in Asia or Africa, or the Moor-lands in Spain, or the Islands of the Sea. While the remnants of the human race, however concentrated or dispersed, wherever wandering, whether Basque or Finn or Tartar or American savage, have carried with them the idea of the Great Spirit, have believed in him reverently and worshiped, and have piously transmitted this faith to their children and their children's children forever.

The science of comparative philology, in all the speech of earth, with myriad living voices and countless winged words, not only testifies for the past, but tells to the present and to all coming time—tells of faith in God. Mr. Spencer has asserted a postulate, which is fundamental with him, that invariable belief is the highest possible test of certainty in human knowledge. In his own words, "The invariable existence of a belief is our sole warrant for every truth of immediate consciousness, for every primary generalization of the truths of immediate consciousness, for every axiom, and for every demonstration." * The youngest neophyte can easily apply Mr. Spencer's postulate to the case in hand. One thing, at least, is evident, that there is no conflict between true science and true faith.

In reaching the conclusions to which I have just

* Psychology, p. 28.

alluded, science has in each direction pursued the line of induction, assuming for an invariable law, as Bacon did, the principle that every effect must have a cause, an adequate cause, and therefore the course of nature is uniform and constant, and the method of induction is valid. This is in direct contrast to the bastard induction of Mill, which, as he complains, is "slow of acceptance," and should be; because it can never be reliable, based as it is upon a baseless "possibility of sensation," which is itself based upon the baseless "series of feelings" of a baseless mental being, which, if it exist, according to this useless and spurious induction, "never can be truly known."

True science, following not the false but the true Baconian method of induction, has, in its different directions, reached these conclusions confirming religious faith; while the great representatives of science, Bacon, Locke, Newton, Whitney—not to mention a host of no less worthy names which throng the vast temple of science—really and reverently believe in God. We recall Mr. Darwin's testimony, which will be admitted as "calm and impartial," at least in this direction: "The question whether there exists a Creator and Ruler of the universe has been answered in the affirmative by the highest intellects that have ever lived." To the

sceptical scientist we commend the most thorough application of the Baconian method, "for," in the words of its author, "while the mind of man looketh upon second causes scattered, it may sometimes rest in them, and go no farther; but when it beholdeth the chain of them, confederate and linked together, it must needs fly to Providence and Deity."

We do not notice materialism for the reason that it is not a settled science, nor can it be, by its very nature. Scientific knowledge is based upon consciousness,—the consciousness of the knower. But consciousness testifies to the self and the not-self—to mind as knowing, and matter as known but not knowing—to both as existing, and existing in contrast. To impugn consciousness is to undermine science; to discard the testimony of consciousness is to destroy the possibility of science. I might include another reason, which may have greater weight with those who are curious for anything in this direction,—the admission of Professor Huxley: "I am no materialist, but, on the contrary, believe materialism to involve grave philosophic error."* And yet another reason, which may have still greater weight: According to Professor Fiske, who will be readily accepted as good authority by the class just referred to: "Those who wish to see materialism

* Physical Basis of Life.

refuted by philosophic reasoning, and not by appeals to vulgar prejudice, may be referred to the latter portion of Mr. Spencer's lately-published volume on Psychology." *

In the light of these preliminary admissions we discern more clearly the appropriateness of Professor Tyndall's "Lecture on the Scientific Use of the Imagination," before the Liverpool Association, and the peculiar force of his statement: "The imagination has become the mightiest instrument of the physical discoverer"; and that "by this power we can lighten the darkness which surrounds the world of the senses"; that, "in much which has been recently said about protoplasm and life, there was only the outgoings of the same power." But, not to multiply quotations: after such statements by a master of exact science we cease to wonder that experts in positive philosophy and sympathetic reporters, who nurse their scepticism at the neglect not only of duty, but of philosophy, who proclaim the great discoveries of physical science which they do not even comprehend, and the explosion of theology which they do not, and will not understand, would thus conceal the weakness of their position, or comfort themselves by imaginary victories.

* Letter of March 1, 1871, to the New York World, from Mr. John Fiske, of Harvard University.

But we turn to another admission,—that man is a religious being.

Of rationalism this is not only the admission, but the assertion. Assuming as an axiom the principle of an absolute religion, which belongs to man's nature, and as such is common to humanity, rationalism arrays its objection against a written revelation as philosophically and practically irrational; that no external revelation can extend the religious conviction already universal, or improve the internal revelation of God to the soul. The Radical Club recently listened with manifest approbation to this statement from one of its lecturers, that "the religious element is one of the strongest in the human soul"—an admission offered as at once an explanation and a confirmation of the fact that "religious controversies and wars have been the most bitter and deadly which the world has ever known."

Spinoza, whom Dr. Hedge styles the typical exponent of pantheism,—Spinoza taught the immanence and prevalence and interfusion of God, flowing throughout the universe; so that, in the language of one of his interpreters, "All religions have windows that open to those all-governing skies." Satan is expelled from the universe as an impossibility, and all are religious, since, according to pantheism, each believes in nothing but God.

On the other hand, Comte, at first, magisterially excluded religion from his positive system as a delusion characterizing the childhood of the human race; but, finding the sentiment still prevalent and persistent, upon maturer reflection he supplemented positive science by an elaborate system of religion, demanding for each day two hours of religious service, with a "Catechism of Positive Religion" and a "Positivist Calendar." *

While Mr. Mill rejects Comte's "Politique Positive" as a system of politics and morals, he applauds his religious systems, but suggests as an improvement that the "grand être," the divinity Comte would adore as collective humanity, we should worship in private adoration to woman as the *sexe aimant*, the proper representative of the "grand être," and, whether dead or alive, "les vrais anges gardiens."

Mr. Spencer would rear his altar not to collective humanity, but to the unknown God; where Mr. Huxley would unite with him in worship, not perchance with the expressiveness of Mr. Mill in his private adoration of woman, or of Comte with the public assembly of the French positivists in the two hours daily devotion to the "grand être," or with the English positivists in the presence of "collec-

* See Publications of the English Branch of the Positive School or, Publications of the American Branch.

tive humanity"; but Mr. Spencer and Mr. Huxley, apart from the positivist assembly, would unite in higher worship, "for the most part of the silent sort."

Mr. Froude tells us that "God gave us religion, although the devil gave us theology."

Mr. Huxley speaks of the religious sentiments as "the noblest and most human of man's emotions." * Mr. Higginson declares: "The religion of the heart can never perish, because it is a human instinct;" and he predicts that at some time in the future "there will meet in some one of the world's great centres an œcumenical council of the human race, drawn together by the natural religion of the human race—the religion of the heart." †

I have dwelt the longer upon this admission of philosophical scepticism,—that man is a religious being, because it is fundamental toward theism and significant of its inherent strength, in contrast with the preliminary admissions already noted as significant of the inherent weakness of scepticism. All religions lead to the great question of God. Indeed, religion is, strictly, a recognized relation toward God and dependence upon him. Without this the term itself is deprived of significance. The alternative is una-

* Lay Sermons, etc., p. 16.

† See Lectures at Horticultural Hall, Boston, January, 1871.

voidable : Religious worship and dependence have a correlative object, or this "strongest element in the human soul," this "noblest and most human of man's emotions," is most false and deceptive—a conclusion which would not only endanger religion, but with it also endanger "positive philosophy."

But, while philosophical scepticism, by its own admission, can not disprove the prevalence of the religious sentiment among mankind, it is especially powerless to disprove the facts of Christian experience.

This experience is attested by the best and the wisest of each sex in every clime and in every age. With the progress of civilization and the growth of intelligence, the testimony accumulates. Challenged to reply, philosophical scepticism remains in self-adjudged silence. By its own admission it has not applied the very test required by its own philosophy. In the very nature of the case, it does not, can not claim to have entered upon the ground of Christian experience, much less to apply this test to the system of faith, and still less to disprove the experimental argument which every Christian affirms for himself, and which the whole Christian world reaffirms with combined consciousness and sincerity. This concession, it should be observed, is by no means gracious, but unavoidable, and is, it should be remembered,

fundamental toward Christianity as experimental. This is not, indeed, the field of sense, where men walk only by sight, and live by bread alone. The phenomena are not material; "The kingdom of God is not meat and drink"; yet the experience is no less real, no less intense. It is a life which transcends the life of the animal as far as "righteousness and peace and joy in the Holy Ghost" is more exalted than mere sensual gratification. Nor is it, indeed, the field of the understanding, when it judges merely according to sense, depending for its premises solely upon observation, and thence deducing conclusions by dialectical processes, which the apostle Paul, in the light of his Christian experience, has significantly styled "vain philosophy." Yet the knowledge is no less satisfying, no less certain. We speak what we do know. We have not followed cunningly devised fables. Whether there be tongues they shall cease, or knowledge [phenomenal knowledge], it shall vanish away; but "this is life eternal, to know the only true God and Jesus Christ whom he hath sent." Within this field of "noblest and most human experience," thronged by multitudes of the best and wisest witnesses—within this field physical science, by the very nature of the case, can not enter; and here philosophical scepticism can only in silence doubt; it can not deny; and here most forcibly is it

reminded of Tyndall's confession: "The logical feebleness of physical science is not sufficiently borne in mind." Yet this is only the negative statement of a fact self-evident, that for philosophical scepticism on physical grounds to deny or ridicule religious experience is not only feeble, but illogical.

But not to linger within the field of religion and religious experience: in this extremity, philosophical scepticism puts forth the plea of reason, instead of experience,—that "Reason is the only arbiter between truth and falsehood which we are sure we possess." Such is the re-statement of the admission by an authority no less unquestionable than the Westminster Review, and as recent as October, 1872; an admission, be it however remembered, though so recent, yet by no means novel—an admission, which it would seem might win the very elect, but whose context warns of a foe in the garb of friendship, while it discourses thus upon "The *Æsthetics of Physicism*": "As reason must ever be the only medium by which the truth can be demonstrated between man and man, it may be taken for granted that pure materialism is the only creed which a rational creature can adopt." However we may regard the admission, it is utterly impossible to accept the logic. Indeed, we can conceive of no

principle of reason or process of reasoning which authorizes the conclusion; not even with "the possibility for sensation" and "the series of feelings" (for soul) manipulated by the adroit induction of Mr. Mill's logic that two and two may make five and that two straight lines may inclose a triangle; for, in the enthymeme of the Westminster Review, not only is a premise wanting and the process vitiated by an illicit major, but the very terms assumed are lost from the conclusion. However we may regard this admission, it proves quite too much for the purpose of "physicism." This appeal to reason as arbiter we not only accept as timely, but commend as highly rational, if we may be pardoned the apparent, but unreal pun. It is timely that experience itself be tested, which is possible only by the proper standard; it is essential that induction have some reliable guide, which can only be by the application of some authoritative rule. We thank our modern sceptic "for that word,"—reason as arbiter. True, it does not harmonize precisely with the claim of Spencer, that "Experience is the sole origin of knowledge";* or of Comte, that "Physics is the mother of all science."† Still, reason shall be the arbiter. It may not confirm the declaration of Schelling and Hegel that "Nature is petrified

* Recent Discussions, pp. 119, 167.

† p. 117.

intelligence";* nor the opinion of the materialist that mind is rarefied matter. Still reason shall be the arbiter. It may find something to condemn in Spencer's definition of science, as "an extension of perceptions by means of reasoning"; † or the statement of Oken and Hegel, that "to philosophize on nature is to re-think the great thought of creation." ‡ Yet, according to the philosophical, and at the same time sceptical, Westminster Review, "Reason is the only arbiter." Indeed, to our surprise, Herbert Spencer, in a careful review of Oken and Hegel, seems to recognize the same authority, and make the same appeal. Condemning Oken for applying "a bastard *a priori* method," Spencer proposes "the legitimate *a priori* method, which sets out with propositions of which the negative is inconceivable." There is, then, an *a priori* method, which is legitimate; and, by the admission and example of Mr. Spencer, in the highest appeal, "reason shall be arbiter."

We are thus, by this combined admission, referred to an authority which may decide whether experience itself can in any department of phenomena be trusted—whether the senses themselves in the reports they bring us are reliable; or whether the internal and the external worlds which are thus reported are unreal and illusory, "like an insubstan-

* Recent Discussions, p. 169.

† p. 160.

‡ p. 167.

tial pageant." It is evident that some unquestionable authority must rule this testimony as valid, or philosophical scepticism will invade the field of the senses, and wrest even from positive philosophy all assurance, and drive us into the formless void of nihilism.

And beyond this, if bare facts and phenomena are true, as the senses report, is there nothing else—no bond of connection to unite these effects to causes, and relate these phenomena to things, and thus combine facts and forms and things into worlds, and worlds into a real universe, existing in space and time? What shall decide whether this work of the understanding is valid or vain?

No experience has reached and settled this great question; and if there be no other appeal, then philosophical scepticism may successfully invade the field of the understanding, and vitiate with doubt the very process of induction. Without some first principles, induction itself is impossible, and neither experience nor understanding can avail. But these first principles reason alone can supply. Thus reason, and reason only, can guarantee the validity of induction and deduction, and regulate experience; in a word, save us from credulity on the one hand, and doubt on the other—the Scylla and Charybdis which threaten every course of

thought. Reason, then, shall be the arbiter. While we promptly pledge submission to its rulings, we shall insist that philosophical scepticism, according to its own arrangement, be subject to the same authority. If reason verify for the sense, we will accept it, even to the utmost limit of physical science. If it verify for the understanding, not only ourselves, but positive philosophy must accept the verifications with the authorized deductions. And if it verify for itself, revealing to us in its own light fundamental truths, reached by "a legitimate *a priori* method"; if in morals it rule the testimony of conscience to be valid, and in religion assert the validity of revelation; if it discriminate between material and mental phenomena, and refer the one to a physical, the other to a metaphysical origin; if it relate effect to cause and qualities to substance; if it affirm spiritual identity and free personality and moral obligation and the duties of religion, and thus condemn philosophical scepticism as not only illogical, but also irrational, we are still to abide by its superior rulings. There is no appeal; "Reason," says the Westminster Review, "is the only arbiter." Certainly, we respond, if reason can and must verify for the sense; if it can and must verify for the understanding—certainly, it can verify for itself, in its own light and by its own authority. And were we called

upon to establish an affirmative, instead of considering the admissions of philosophic scepticism, we would show that thus reason does verify in the precise particulars indicated, and, having done this, rest our cause. For, however man becomes man,—whether by “natural selection,” “evolution,” or “special creation,” it is but a truism to assert that man is what he is, and as such he must be regarded, by common consent of selectionist, evolutionist, and creationist, as the highest being on the earth; as such, his testimony must be admitted as the highest within the same sphere. And further, since he can investigate and measure all things around him, but can not be measured by them, so he is philosophically the measure of all things. And further still, he alone takes testimony from all the rest, which he examines and pronounces upon in the light of his own reason, thus guiding his own testimony, and confirming it as the highest of all, and decisive in the field of science and philosophy. This, his own reason declares legitimate, and from this decision of human reason there can be no appeal to an inferior tribunal.

But since the Westminster Review, notwithstanding its admission, volunteers its support to Dr. Büchner's theory of “matter and force” as “all that is,” and to “materialism as the only creed

which a rational creature can adopt," it is fitting that we call attention to other admissions of philosophic scepticism, which have an important bearing on this discussion.

Philosophic scepticism, be it physical or metaphysical, admits that, at least, something is. Doubt is. This is known by consciousness. And Mr. Mill admits that "what is known by consciousness is known beyond the possibility of question," * and that thus "we know our feelings." But doubt is not an abstraction, independent and unrelated. Doubt is the mind doubting. It is the mind which doubts, not mere matter. Already, by this admission, the sceptic is borne beyond the control of his own scepticism. The effect and the cause, that is, the actor and the act, both are at once known and affirmed by the consciousness. Even Herbert Spencer, with singular precision, pointing out the divergence between some of his own views and those of Comte, admits our consciousness of cause—"a consciousness which remains dominant to the last as it was at the first," † and declares: "The consciousness of cause can be abolished only by abolishing consciousness itself." ‡ The doubt, then, is accounted for by referring it to the doubter. Thought and feeling and

* Logic, Introduction, p. 191.

† Recent Discussions, p. 124.

‡ First Principles, Sec. 26.

volition,—these appear in the light of consciousness. Reason and conscience, too, are known with the same conscious certainty; and these are accounted for by referring them to the same conscious mind. Mr. Spencer admits “the personality of which each is conscious, and of which the existence is to each a fact beyond all others the most certain.” *

But the phenomena around him which bear no resemblance to doubt or belief, to thought or feeling or volition; in a word, which bear no resemblance to the phenomena of mind—how shall these be accounted for? Evidently by referring them to something material, in which they inhere, and which produces them. These phenomena do not exist as abstractions, independent and unrelated. In the irrefutable assertion of Mr. Spencer, which amounts to more than an admission, “It is rigorously impossible to conceive that our knowledge is a knowledge of appearances only, without at the same time conceiving a reality of which they are appearances; for appearances without reality is unthinkable.” † The admission, then, is inevitable that matter is, and that mind is; or distinguishing them by whatever names, that something is which has material qualities,—extension, figure, solidity, weight, and measure; and that something is which has mental qualities,—

* *First Principles*, p. 66.

† p. 88.

thought, feeling, volition, reason, and conscience. By this admission the sceptic is borne beyond the control of his own scepticism. But these material things—how are they accounted for? By a reason in or out of themselves? And the doubting mind—how shall this be accounted for? By a reason within or without itself? For even Mr. Darwin admits not only that mind—finite mind—is, but also that it has not always been; an admission which history approves and geology confirms. Must there have been a super-cosmical mind, as the cause or origin? Why the demand that qualities be related to some substance as inherent—a demand which common sense makes, and forever speaks? Nothing but a thinking soul would raise such a question, or could answer it. The mind for itself sees what reason affirms and consciousness reveals, that mental qualities, e. g., thought, feeling, volition, inhere in mental substance. A like demand is made that material qualities be related to some substance as inherent. These special questions concerning quality and substance, effect and cause, and the all-embracing questions, Whence? and How? and Why? are not peculiar to the metaphysician and theologian. They are no less common and urgent among the scientists and philosophers, even the most positive of the positivists.

The intrepid Büchner * not only raises these questions; but in Part I. claims to answer the question Whence do we come? in Part II., Who are we? in Part III., Whither do we go? In the first and second Parts he modestly claims to "solve the great mystery of existence"!

Theoretically, indeed, as we are reassured, these inquiries are magisterially forbidden. But the irrepressible questions will not down at the bidding. Theory is powerless here. Practically these questions are indulged; in fact, they are continuously repeated. What are the phenomena? is the clamorous demand of positive science; and whence? from force or volition? from matter, or from mind? and how? in correlation and conservation, or in persistence and distinction? by the law of evolution,—the heterogeneous evolving from the homogeneous? or by the contrary process,—the heterogeneous appearing according to intelligent prevision and superintendence? Are all phenomena the manifestation of forces? And if so, are these forces correlative and convertible? And if so, is matter force, or is it motion? And which is first, force or motion? And if matter is either, what is force? or what is motion? and whence is it? And if matter is neither, what is it? And which is first, matter or force or motion?

* Place of Man in Nature.

While such questions of positive science are ceaselessly recurring, until they burden the press and the public, it will not do for philosophical scepticism to pretend disapprobation or contempt of such inquiries, as if they were unauthorized or unimportant. The admission is as full as if it were formal. This admission is, at the same time, confirmed and extended by the varied, but unsatisfactory, attempts of philosophy to answer these profound questions, What? and Whence? and How? and Why? questions which are at once fundamental to all science and native to all minds. Philosophical theories have been elaborated and multiplied and modified, until imitation has seemed unconscious, and the old faintly or fully reappears in the new, and originality, if longer possible, seems no longer certain. As we may have occasion to refer to some of these theories shrewdly labeled "modern," and presented by the "new philosophy" as original, and industriously paraded as triumphs of recent discovery, it may be well to mention some of the earlier theories. Even a brief mention will prepare us somewhat the better to recognize old forms in new faces. There is the theory that all things came by chance, and then that all things are by fate; that even God can not be God since he must be controlled by fate.

The atomic theory of Democritus, or Moschus, that atoms by fortuitous concurrence form this intricate and orderly mechanism of man, and the no less intricate and orderly universe of worlds.

The hylopathian theory of Anaximander, that there are phenomena or qualities, but there is no substance ; that these qualities are real, yet originating from nothing ; and that this dead matter, this chaos of insubstantial yet real qualities, issued in an orderly arrangement of organic and inorganic beings and worlds and systems, and a universe evolving life and mind and spirit.

The hylozoic theory, differing from the former not in making matter the source of all things, but in "ascribing latent life and understanding to the dead matter."

I might omit the mention of the homœomery of Anaxagoras, who sought to avoid the absurdity of producing phenomena from nothing, or qualities without substance, and therefore supposed that the atoms of Democritus "were originally endued with all those forms and qualities that are vulgarly conceived to be in bodies, some bony, some fleshy some fiery, some watery, some white, some black, some bitter, some sweet, and the like." I might omit the mention of homœomery, since Anaxagoras himself was a theist, at least not an atheist, and

taught that an eternal mind fashioned the eternal matter. But this theory has been perverted to the service of atheism, and, contrary to the intention of its author, has been made to deny the existence of God.

The theory of Parmenides (whom some theistic apologists have vindicated from the charge of atheism), the theory partly true and partly false, that, "as something could not come from nothing, therefore creation, [absolute origination] was impossible"—a theory which has been suborned to deny the existence of God; though, if unbribed by atheism, and uninfluenced by a false theory of creation, it would testify for God as Creator, and most consistently with the true view of creation.

The theory of Empedocles, that hyle or rudimentary matter was increate and indestructible. However this theory has been perverted, yet Empedocles repudiated atheism.

Another theory, like the Ionic, taught that all things flow without a guide or governor to regulate the ceaseless movement; yet, unlike the Ionic, that not natural forces, resulting in motion, but fire penetrated and subdued all things unto restless commotion.

The theory of Protagoras, that whether there is a real world which all in common may know as existing

is wholly uncertain, since there is nothing in the consciousness but sensations which are ever changing and transitory. Man is the measure of all things, but only for himself, and not for another. In this, the self-styled modern theory of Mr. Mill may see itself reflected. Such a theory would be too narrow and fluctuating for establishing even a physical science, much less a science of the human mind or of God—a psychology or theology. While the one theory referred all things to fire, another ascribed all things to water, and still another attributed all things to air as first mover in producing a universe.

Thus has the atheistic (or non-theistic) adventurer in his chaotic realm of speculation been relentlessly tossed, fleeing now from the tempest of wind, and now from the fiercer tempest of water, and anon from the still fiercer tempest of fire, only to plunge into the fortuitous whirl of the restless atoms of a universe—the sport of capricious chance, or the victim of blind and pitiless fate.

Such labored, confused, and unsatisfactory theories—of which I have presented only a specimen—imply the admission of a demand, which even the atheist can not resist, to account for the existence and order and design of himself and the universe; to seek, unintentionally, for the Author and Disposer

of all things ; in the simple but significant language of Scripture, to "seek the Lord, if haply they might feel after him, and find him, though he be not far from every one of us ; for in him we live and move and have our being."

Lucretius, with logical dexterity equaled only by the Westminster Review in its defence of Dr. Büchner, denied that anything could have been made for intended use, for the thing must exist before the use. Hence he says there is no such thing as antecedent knowledge doing anything by intention. Such logical adroitness could as well dispense with principle or premise, and at once assume the desired conclusion. It would not only abbreviate, but improve the process.

Hobbes and the French atheists assert that there is no higher power than the forces of nature, and assume that the ideal element of thought, of being, of power, of cause, and of nature is identical, and therefore attribute to the material forces of the material universe what the theist attributes to the supreme intelligence.

Others, as Bruno, Hegel, and Schelling, maintain that God is only the principles and laws of the universe ; that the universe is thus a sort of self-existing and self-developing organism.

Others, as Spinoza, hold that, "prior to the crea-

tion of the world God was not God ; he was what he was ; that God and all things are one and the same ; that beside God no substance can be or be considered ; that God in the evolution of the material and spiritual is the absolute Spirit ; that this Spirit becomes objective to itself in nature, and returns to itself through the human spirit ; that God becomes self-conscious in man."

Lucretius denied the possibility of final cause. These deny the possibility of miracle.

Antiquated sceptical theories have been reproduced, sometimes with, sometimes without, modern modification.

"Gemmules infinitely numerous and infinitely minute," which no human vision or skill of science has ever detected—"gemmules" have been suggested, and "pangensis," and "natural selection and sexual," to account for the origin of species and the descent of man. This theory, embalmed and for twenty centuries enjoying undisturbed repose, scarcely introduced to the modern world, and by no means established—this theory has been seized upon by the eager sceptic, apparently longing for some demonstration of his near kinship with the ape, and of his more distant, but unbroken relation to the Ascidian, and with undisguised satisfaction has been pressed into the service of philosophical scepticism,

with persistent obliviousness of Mr. Darwin's admission that "animals have descended from at most four or five progenitors, and plants from an equal or lesser number; life with its several powers, having been originally breathed by the Creator into a few forms or into one." *

The hypothesis of "natural and sexual selection," even if established, could not be decisive of the great issue involved in this discussion. There would remain the question of origin to settle. For the sake of argument, if we admit Darwin's theory that man descends (is developed) from the monkey, differing only in degree, that the ape descends from something lower, and lower, and lower still, until we reach blank matter, like the stock or the stone; yet, since man has the highest authority of anything in the domain of nature as he is the highest development, and since man is by this theory as strictly nature as the stock or the stone, the testimony of man's inner voice or reason must be paramount. What is this testimony? Is it for or against the supernatural? Evidently for it. All history, religions, literatures, languages prove this. All these have recognized the supernatural. We have the thoughts and the words and the worship, the systems and the practice of all the past in evidence on this point. We know not

* *Origin of Species*, p. 569, quoted by Mivart, p. 292.

but other things, could they speak, would give the same testimony. We know that man—rational man—everywhere and in all the ages, gives this testimony. This is one horn of the dilemma. If, on the other hand, Mr. Darwin admits that man differs from animals and things not only in degree, but in kind (as we affirm, for man is person, not thing), then man is supernatural—then he is miraculous in his origin and supernatural in his testimony. This is the other horn of the dilemma. According to the one, nature (if man and all is nature) turns state's evidence against Darwin as soon as it can speak (e.g. as a man), and by its own united voice declares a Supernatural, to be worshiped, feared, and obeyed. According to the other, the testimony itself is rational—supernatural, as well as witness for the supernatural.

But the theory of "gemmules infinitely numerous and infinitely minute." What are these, and whence, and how? Does the "exact science" positively know that they are "infinitely minute?" How can we know them, if they are infinitely minute? How, especially when the "positive science" declares as a "first principle" that we can not know the infinite? And if, according to such a "first principle," we can not know a single "gemmule," because it is "infinitely minute," how can we know that one exists;

and how especially, that they are "infinitely numerous?" This obvious criticism concerns at least the sceptic who would avail himself of this theory to dispense with a Creator. I know it is said that "gemmules multiply by fission"* and to confirm this it is asserted that "Thuret has seen the zoöspore of an alga divide itself, and both halves germinate." But how does this reach the difficulty unless the zoöspore be a gemmule? And if it be, then the difficulty increases, since we are required not only to know a "gemmule," which is "infinitely minute," but also to know "both halves" of the infinitely minute gemmule! To make the point clearer for the scepticism which would adopt this theory, Professor Delpino has arranged this convenient formula: "The existence of the gemmules is a first unknown element; the propagative affinity of the gemmules is a second; their germinative affinity is a third; their multiplication by fission is a fourth,—and what an unknown element!"

"Physical units" have been proposed, "with mysterious powers of producing and reproducing organisms." Atomism, hylozoism, and hylopathianism of the pagan period, with the increate and indestructible forces of Empedocles, have been severally recalled in our day, and merged into "evolution

* Scientific Opinion, Oct. 13, 1869, p. 408, quoted by Mivart, p. 231.

and correlated forces," and, bearing this new name upon their modern frontlet, have been hailed as the climax of modern scientific discovery—the veriest wonder of the nineteenth century. This admiration of the "younger naturalists," as Professor Youmans patronizingly puts it, may be deserved. To question its propriety is not our province nor our purpose. Of the valid advances in this direction we would not withhold our own admiration, nor refuse our hearty assent to authorized conclusions; but we protest against the crude haste displayed in the effort to array the doctrine of the "conservation of forces" against theism, and to thrust evolution into the false attitude of atheism.

Suppose matter itself in its final analysis is force, as some of our most profound and philosophic theists have held and taught. Then, certainly, upon any well-defined and consistent view of creation, there is, in the very nature of the case, a conservation of forces.

Suppose all the primary forces which constitute elemental matter are ultimately reducible to "gravity and heat," or "the antagonistic and diremptive," or "the centripetal and the centrifugal," or "the potential and the actual." Does this thorough analysis array the doctrine of forces against theism? Certainly not. Some of our ablest theologians have

insisted upon this very analysis, anticipating Mr. Spencer and his disciples both in the classification and the conservation of forces.

But "the correlation of forces," it is sometimes defiantly demanded—does not this disprove theism? It may, according to the logical rules of the objector; but not according to the logical rules of Aristotle and Bacon, of Hamilton and Mill, not according to the ordinary process of induction or deduction. If the forces, when they are gravity and heat, do not disprove theism, it is difficult to understand how, by any known logic, they can disprove theism when they become correlated or converted into heat and gravity. Thus far we have referred to material forces only. Whether all the forces which are implied in a living body may be correlated or converted into gravity and heat in a lifeless body—whether all the forces which are implied in an organic, living, thinking man may be correlated or converted into gravity and heat of an unthinking, lifeless, inorganic stock or stone may, at least a little longer, remain an open question. It should be borne in mind that mature and earnest champions of the doctrine of "conservation and correlation of forces" admit that entire correlation is an open question. Even Professor Barker, incidentally, and so the more strongly, admits this very state of the question:

“Can we longer refuse to believe that even thought is in *some mysterious* way correlated to the other natural forces? And this even in face of the fact that it [thought] has never been measured?” Scientists, then, know of no way in which thought and material force can be correlated; they can not weigh nor measure thought? Is not this, then, an open question? We commend the question to “positive science,” as one which deserves and demands additional (scientific) research. And we suggest to the eager philosophic sceptic impatient to publish the decisive oracle to the long-desired confusion of theism, that he cultivate patience, lest he run upon a fool’s errand.

At the scientific reunion in Insprück, M. Mayer, a prominent physicist of Germany, who has directed especial investigation to the correlation of forces, made an address. Repudiating the hypothesis that thought is only a form of chemical force, and cognition the result of free phosphorus in the brain, he declared it “a great error to identify molecular activity and intellectual action, which may be *parallel*, but are not *identical*. As what the telegraph says—the contents of the dispatch—could never be regarded as a function of the electro-chemical action, . . . so the brain is only the machine. It is not thought; intelligence, which is not a part of

sensible things, can not be submitted to the investigations of the physicist and anatomist." In the mean time, let the eager philosophic sceptic carefully consider his logic, lest, if the oracle announce correlation of forces as demonstrable, the atheistic herald even then should run upon a fool's errand. The question of forces, their conservation and correlation and analysis, falls far within the comprehensive question involved in this discussion,—the question of a God and of faith in God.

These are but a few of the many theories proposed to account for and explain the system of things. In these manifold and diverse theories, old and new, and old renewed, there is involved not only an admission of the importance and difficulty of answering these great questions of the soul, but also the admission of inherent weakness in the theories themselves. They are mere hypotheses. Even the very positive Westminster Review (Oct., 1872) says of Darwin's theory: "The case of man's descent does not yet admit of proof. The same may be said of the origin of any other species, of Darwin's hypothesis in general, and of the hypothesis of special creations which it denies."

La Place, while he would dispense with the theism of Newton—La Place, bold among the boldest scientific investigators, offers his "Exposition du

Système du Monde ” as an hypothesis, and as such presents it with becoming diffidence : “ Je presente avec la défiance que doit inspirer tout ce qui n’est point un resultat de l’observation, ou du calcul.” But not only are these theories of “ exact ” science mere hypotheses concerning the questions at issue ; they are made, it should be remembered, with the provisional admission that “ science can not find a first cause.” * Whatever science may answer to the soul’s irrepressible and comprehensive challenge, it refers to method only, not to origin. Transcending, as well as comprehending, the field of its investigations are evermore the questions, Whence? and Why? The positive philosophy affirms truly, and must perpetually affirm : “ Science can not find a first cause.” Science evermore traces, and can only trace, the manifestations of the first cause. Whatever it be—material or spiritual—science studiously traces the manifestations of the first cause in the order or law which it discovers, and which it seeks to generalize. Retracing specific to more general laws, it classifies evermore in higher and still higher generalizations, steadily extending its knowledge as it reaches a larger unit. This it makes the point of a new departure, forever asking, What

* Comte.

is? and the higher question, How? or in what order, or by what law it is.

And here, at length, we reach the comprehensive admission that science seeks to trace all effects to unity—that philosophy would unify its knowledge by retracing all phenomena to one common origin. Each particular science seeks this unity for itself, and “universal science seeks after absolute unity.” To this ultimate result all its processes tend. To seek this unification it is authorized; nay, it is compelled. It is claimed, on the one hand, that this final unification may consist in matter, and not in mind; that matter exists by a reason in itself; and that matter is the beginning, the originator. But how do we get a notion of any beginning? Is it not by the power (the energy) of our own minds putting forth new activities, producing effects, originating phenomena? What, we ask, is matter, that it should be the originator, the beginning? Does scepticism reply, “It is force”? Again we ask. Is force an abstraction, independent and unrelated? Does not force itself originate in mind?

These and similar questions confront the theory of materialistic unity.

On the other hand, it is claimed that multiplicity in the universe may be reduced to pantheistic unity; that there is not only theism, but pantheism. God

is all, and all is God. But, as no one else will believe that the pantheist is God, and as each knows for himself that he is not God, the excess of pantheistic admission is apparent.

The fault is not in the attempt at unification ; for this is unavoidable. Atheist, pantheist, and theist, materialist and spiritualist, are alike compelled to it by the very law of thought. The admission is inevitable. The fault lies in the principle and the process of unifying. Is the principle right? Is the process broad enough? Here is the point of divergence. Which is the true course? Which is the false? These questions remain to be considered.

CHAPTER VI.

MODERN THOUGHT.

I N the strife of theories, both science and faith should be saved from confusion. Carefully, at least, if not repeatedly, should we take our bearings, that we may better detect the drift of modern thought, and distinguish the course of false thinking from that of the true.

At the outset, it is obvious to remark, but it is important to remember, that thought has its laws as fixed as those of material nature—perhaps comprehending the laws of nature and confirming the laws of faith.

The primary law of thought is the recognition of existence ; the existence of the thinker, and then of the act of thinking as involving content. This is illustrated by the proposition *cogito*, expressing the simplest judgment. Whatever may be thought of Descartes' familiar enthymeme, *cogito ergo sum*, to which we do not refer, the proposition *cogito* (I think), illustrates this primary law which thought implicitly follows in the simplest judgment, *I am think-*

ing. In the simplest and earliest thought, then, there is by inevitable law the consciousness of existence and action—of the thinker thinking.

But more than this, there can not be thought without content, and the primary law involves this, that in every thought there shall be the thinker, the thinking, and the theme; the agent and the content, the subject and the object, to both of which the thinking relates. This primary law is so comprehensive that if the mere phenomena seem to furnish the content, the law is not satisfied. It claims more than this, viz. some substance underlying the phenomena, as well as some person originating the act of thinking. So scrupulous is this fundamental law of thought, in each direction requiring reality, implying that there can not be an appearing or manifesting without some *thing* which furnishes the appearance or manifestation. Even Herbert Spencer admits, asserts this, to the confusion of Comte and Mill and Lewes and all mere phenomenologists. There must be a seeing self or mind as well as an object seen. For example, a sensation or impression can not be, unless there be something to produce the sensation or impression; and more, something to cognize the impression or sensation. Without a mind to receive, there could be no appearing in the universe, no manifestation. So that at the outset, we find a

certain modern system, in both directions violating this primary law, and therefore doomed to self-renunciation or to self-destruction.

Let valiant knight-errants of science who would fiercely slay theologians and metaphysicians, on the right hand and on the left, sheathe their swords. Their own safety and the higher interests of science will be promoted by peace rather than by Quixotic warfare. Mr. Spencer's advice to scientists is timely and significant: "He who contemplates the universe from the scientific point of view, must learn to see . . . that religion must be treated, as a subject of science, with no more prejudice than any other reality."*

Even Mr. Mill admits that "there are laws of thought and of feeling which rest on experimental evidence which are a clue to the interpretation of ourselves and others. Such laws, so far forth, make psychology a positive science, as certain as chemistry."† According to the involuntary confession of the "straitest of the sect" of inductionists, then, we shall, as we advance, meet with other laws of thought.

Knowledge begins in consciousness. Without consciousness knowledge were impossible. Whether

* First Principles, p. 21.

† See his Inaugural Address at the University of St. Andrew.

or not suggested by Socrates, at least since the time of Descartes this principle has been admitted. In regard to knowledge, then, the subjective factor is primary and chief, and is to be studied first and chiefly, if we would ascertain what can be known and how it can be known. What then is the scope of our knowledge? Evidently, the scope of our consciousness. Whatever may be presented to consciousness may become matter of knowledge.

We have already seen that the primary law of thought is that there must be both content of thought, and agent—something which thinks and something about which it thinks. Now what and whence and how is the content furnished? Whether these essential questions can be answered *a priori* we do not stop to inquire. We, at least, will make the approach to the answer *a posteriori*; and by the process of observation, which the most fastidious Comtean must approve, detect the law which regulates thinking in relation both to the agent and to the content.

Starting with simple apprehension, we pass, by a process of the judgment, from premise to premise, and thus to conclusion. This, which is completed reasoning, may be in the line of analysis or synthesis from the general to the particular, or from the particular to the general, and so be legitimate reasoning,

either deductive or inductive. These laws developed into a science constitute logic. To ascertain these logical laws, and properly to apply them, is the appropriate work of thinkers in any and in every age. To invent a new, another logic, and call it a science, is quite incompetent for any thought in any age. The simple apprehension of terms—the first elements of knowledge—belongs to the mind alone; but it is dependent upon the presentation. The senses are to do at least a part of this important service; and the apprehension, without which the presentation can be of no avail, the mental apprehension, must be intuitive. The senses, in this presentation, must be supervised by some higher faculty which must evermore verify for the sense, so as to correct for the mind the faulty presentation of a sense, and confirm the true—as in the opposite cases of healthy condition and of nervous derangement, or when the medium for the action of sense is at fault, as in beholding a distant star whose light has been millions of years coming through space, coming to report to us the position of the star in the heavens,—not its present position, but the position it held ten thousand centuries ago.

Sense is not only unable to verify for itself, its report may be actually false; e.g., sight reports as the present place of Sirius that which it occupied

five millions(?) of years ago, and from which place during this immense period it has been steadily hastening away. Ratiocination, having from the higher laws of astronomy deduced the distance, orbit, and motion of this planet, and the velocity of light, corrects and adjusts the report of sense and tells us the real position which the planet now occupies. Our eyes hail the morning and report the sunrise. But eight minutes have actually elapsed since the sun rose above our horizon; and, again ratiocination must correct and adjust the report of sense and verify for the mind the knowledge thus imperfectly presented. Sense says the sun rises, the sun sets, daily performing its revolution round the earth. But this report of sense must be corrected by some higher mental faculty before it is accepted by precise science and properly announced as the diurnal revolution of the earth upon its axis. The sailing ship is not where the sense reports it, nor is the floating cloud, nor the flying bird. Our friend receding or advancing is not where we see him, nor is our foe. The lightning flash deceives the eye; the thunder's roar deceives the ear. Did the soldier or the sailor trust to sight or sound, disaster would prevail on land and sea; defeat would take the place of victory.

Instead, then, of sense being competent to verify to the mind all our knowledge, it can not always

verify even for itself. Its very reports can not be relied upon. In the instances just cited—and these are but samples of unnumbered instances—we must needs call in our reasoning faculty, the understanding, to rectify and adjust and verify for sense. Reason supervises both, and as between the two decides that the conclusion attested by the higher faculty is to be accepted as valid. And, whatever the pretension of some “advanced thinker” or scientific *coterie*, the world confirms the decision as rational. And now if this be clear and trustworthy, that while sense (sight, hearing, etc.) reports mere phenomena, mere qualities and attributes, but not any subject to which the attributes belong, not any substance in which qualities inhere, nor any cause which produces the phenomena, the reasoning faculty—the understanding—has the competency and the right to supply this deficiency,—to correct again and adjust this report of sense, and affirm to the mind with an authority which gives higher knowledge than mere sense can give,—knowledge of attributes and subject, of qualities and substance, effect and cause; i.e. that thinking is done by a thinker; that extension belongs to a body; that effect is related to its cause. Here, again, reason supervises the work of both, and as between the two decides that the conclusion attested by the higher faculty is to be accepted as valid.

And, whatever the pretension of some "advanced thinker" or scientific *coterie*, the world confirms the decision as rational.

While, then, we admit and affirm what every experiential or sense-philosopher will assert, that the senses present to the mind elements of knowledge; we deny what some of these philosophers assert, that the senses alone can give, and can verify our knowledge.

In tracing the laws of thought we are now prepared to take another step forward.

The reasoning faculty, the understanding, may also present to the mind elements of knowledge deduced from observation and experience. For example, by the argument from progressive approach, the law of motion, or the law of attraction, may be thus presented: that a body can not stop nor put itself in motion, and that all bodies gravitate toward each other. No sense has discovered these conclusions or can verify them. Nevertheless they are laid down as established principles in science. These are among a thousand illustrations which might be given. This second mode of presentation as supervised by the reason is pronounced rational. The elements of knowledge as thus presented and thus supervised are accepted by the mind as verified knowledge. This, we see at once, is a larger field of

knowledge than the former, while it is certainly none the less trustworthy, perhaps less liable to suspicion and vacillation.

But does not reason, also, present elements of knowledge for the intuitive apprehension of the mind—as intuitive as in the case of sense-presentation? An effect which the sight presents for intuitive beholding by the mind, is no less directly presented by the reason as necessarily produced by a cause, and this whether it be the first or the last effect ever presented by the sense.

The wind blows, as the sense affirms to the mind; but sense can not go beyond the effect. Reason, however, as quickly affirms that this effect must have a cause; and the mind as intuitively sees the latter truth through reason as the former truth through sense, and holds the latter truth, to say the least, as certainly and as firmly as the former. Again, the sense can not see or feel or taste or smell space, yet it affirms extension—material extension, as of some body great or small—which the mind intuitively perceives through the sense. But reason as quickly affirms space in which such body may be extended—a space in which all bodies may be extended—even universal limitless space, which no sense can verify, but which the mind sees as intuitively through the reason as it saw, through the sense,

a body extended. Indeed, the latter may have been a fancy, the fancy of a disordered sense ; the former is a fact beyond all possible doubt or uncertainty. Events illustrate the same truth. The event is reported to the mind, reported by the sense, for intuitive perceiving ; but no sense can affirm the time in which the event occurred. Time transcends the cognizance of any sense. Neither sight nor touch nor taste can detect it. But reason as quickly, as certainly, affirms a time for the occurrence of this event—time for the occurrence of every event—time universal, limitless ; and the mind as intuitively beholds this through the reason as the other through the sense. Indeed the sense may be at fault in respect to the specific event ; but the reason is at no fault in regard to time. The mind holds the latter knowledge at least as certain as the former. If it be said that the sense verifies for itself in regard to the things of sense and the mind accepts this intuitively (a statement which we might question, but which we do not now stop to challenge) ; may we not say with higher certainty that the reason verifies for itself in regard to the things of reason, a verification which the mind accepts as the clearest intuition and as of supreme authority? We may apply the same principle to quality and substance, phenomena and subject, effect and cause, axiom and corollary.

The inevitable conclusion, then, is that sense is not the only agency which presents to the mind elements of knowledge. Reason is a surer, if not a more fertile, source of knowledge. Again, sense is not the only means of verification. Reason is as prompt to verify, and no less competent. Sense, perchance, may verify for the things of sense. It may compare sensation with sensation, as touch with sight, or sight with sound; but, at best, how do these gross sensations differ, while, often, they can not avail to help each other, as in the instance of sight and smell, or taste and touch—in the universe of color, or in the vast realm of astronomy. So the verification of sense is ever exposed to error and attended with more or less of mental misgiving, until a higher faculty has been called in to decide the case. Indeed, the very ground for any confidence in induction and generalization, viz. the uniformity of the course of nature, is a ground which no sense can furnish and no sense can verify. Withdraw this ground and all the superstructure of induction becomes insubstantial and “like the baseless fabric of a vision.”

On the other hand, reason verifies for the things of reason with an authority which does not require the attestation of a lower faculty to confirm; nor does it allow the intermeddling of subordinates.

Reason may, does, accept the sympathetic attestation of conscience, and the responsive assurance of faith, and the concurrent testimonials of analogy and order and design from ten thousand thousand voices which fill the universe. Now thinkers, ancient or modern, who, in obedience to mental laws, have employed these modes of presenting knowledge to the mind, and these modes of verification, and these processes of thought, inductive or deductive, analytic or synthetic, are justified in their work. No arbitrary method in the interests of a particular theory or school can be foisted into scientific service to displace or exclude the method which the common consciousness approves, and which the ages of serious and sincere thinking have employed and established. Such a change, if violently precipitated, would be not a revolution, but a rebellion, against the laws of mind—a rebellion to be suppressed by the united force of loyal thought. We would be, we are, no less alert to note the testimony of sense and to encourage scientific observation and experiment than are the positivists. We use the results differently, perhaps, while we claim a criterion at once higher and surer. Within the scope of our theory we embrace all the positive knowledge, all the positive science, which they can get; and by our theory we are authorized to get more.

The advances of modern science in every direction are to be hailed with sincere gratification by every true thinker. Its real successes can not be appropriated and monopolized by any clique or class or country; they belong alike to the world. Everywhere they help the better to interpret the laws which pervade material nature, and to satisfy the philosophic longing of the human soul to know things in their causes, contributing to extend and unify that knowledge in the realm of thought and the realm of force, everywhere revealing more fully the reign of law and the prevalence of order. As true science is evermore consistent with itself (since it is the knowledge of a higher and all-surrounding harmony), its present successes do not annul those of the past, nor demand that we relinquish what has been gained in order to receive what is being secured. Its real office is not to destroy, but to conserve; reverently to guard, reverently to gain. Entertaining evermore this twofold purpose, and cherishing this genuine spirit of science, he is the best modern thinker who is grateful for the past and hopeful for the future, with mind alert, actively awaiting every presentation of knowledge by the lower intuitions of sense, by the higher intuitions of reason, and by the logical deductions from both. It is evident from this threefold presentation of knowledge that science

is by no means restricted to the narrow circle of sense. To change the figure, the great superstructure of knowledge which the individual and the universal mind are uniting to rear is based not upon sense alone, but upon the triple foundation of sense, understanding, and reason ; reason being the cornerstone.

In the process of knowledge, especially in the scientific process, ratiocination, or understanding, supports sense, gives it significance, and makes it serviceable to science by arranging in order the incoherent reports of each sense, and of all the senses, reducing them to results, connecting them to conclusions. With sense alone there could be no science. However strong were the sight, though it could penetrate like the glance of the eagle, undazzled by the noontide blaze of the sun ; however acute were the hearing, though it could detect the harmony of the spheres, as in concentric circles they glide through outlying realms of space ; though touch and taste and smell were intensified a thousand and a thousandfold ; yet, with mere sense and without understanding there would be, there could be, no classification, no judgment, no generalizations, no advance towards science. Reason, in the mean time, supervises the whole process that it be rational not fanciful ; that science itself be not the slave of

tyranny nor the dupe of superstition ; and that sense become not false through fear, nor imbecile through inaction, nor blunted by age, nor drowned in dissipation and maddened with delirium. If reason be enthroned in the soul, its light and guidance penetrate the understanding and pervade the sense ; both become rational ; and man is exalted to his proper place, a different and a higher sphere than that of the animal, and in the right of his own excellence holds dominion. But, if reason be dethroned, human knowledge can be no longer verified ; sense and understanding both wander, lost, without the light and without a guide ; and man is inferior to the meanest brute. In the exercise of these threefold powers, man is conscious of their possession. He needs no argument to make that possession more apparent, while no argument can lessen his assurance. But more than this, he clearly sees the propriety of this threefold possession. He needs the senses to commune with the outer world, to know its varied phenomena, and to satisfy his physical wants. He needs the understanding to prepare him for scientific knowledge and intellectual advancement. He needs reason to satisfy the demands of conscience and the longings of faith ; and, as he holds himself and others morally responsible, to fit him for moral responsibility. This is the more ap-

parent, since, by universal consent, when reason fails man ceases to be held responsible. He may be confined, commiserated, or cast out; but he is not held responsible.

There need, then, be no conflict between true science and true religion. The conflict has been between scientists and religionists. The best thinkers have often been the most devout. Trite as the saying has become, it is no less true, and Baconians at least should not object to its repetition, "Depth in philosophy bringeth men's minds back to religion." Science and religion heartily bid each other good-speed. Religion has served science, and certainly science, especially modern science, with and without intent, is doing much-needed and lasting service to religion in the increasing demonstration it affords of order, "Heaven's first law," and in the steady advance toward higher and still higher unification of knowledge, unmistakably indicating what religion has uniformly maintained: that there is a uni-verse, giving new and still newer significance to that term held in common both by science and religion—the universe.

It is, then, the more remarkable with what refinement of self-conceit a certain set of thinkers now-a-days monopolize the merit of modern thought, and gratuitously assume that all other thinking in these

times is archaic and obsolete; who talk boastingly of philosophical radicalism that shall reverse the world's estimate of more than twenty centuries, proclaim a new definition of truth, ostracize the old leaders, repudiate and banish the established method of thought, and reconstruct the whole empire of knowledge; * who ostentatiously parade a "New Philosophy"; and consistently with such pretension, sneer at conservative thought as superstitious veneration for the past, arrogating to themselves the purpose and the spirit of progress; who would confine science to the field of experience—the field of sense—and then patronize this bantling as the sum of all knowledge and as their own private possession. Lest their bantling be not sufficiently dwarfed, they talk evermore of material science, as if science were only material. † Sometimes, in more liberal mood, they mention both mind and matter, but both attenuated to the slightest phenomenal consistency (Mill); while, in severer moods, they declare feeling and even thought to be material secretions of the brain, as the liver secretes bile (Vogt, etc.).

From such premises, self-styled modern thought would proceed to divorce science and Christianity as incompatible, framing its bill of indictment, and

* See Comte, and Lewes, and positivists everywhere.

† See Büchner, Moleschott, Maudsley, Virchow, etc.

trumping up its testimony in irrelevant and inconsequential conflicts between science and religion. With inflamed zeal it would banish theology as a hoary intruder upon the domain of scientific thought, slay theologians as enemies of scientific progress, and brand metaphysics as an outlaw doomed to fetters and perpetual imprisonment. Having thus cleared the field, it would consummate the new regime by enthroning "The New Philosophy."

The effrontery of such pretension becomes more manifest when we remember that the greatest philosophers of modern times, like Newton and Bacon and Locke and Leibnitz and Descartes and Kepler and Galileo, have been sincere Christians, and that the greatest thinkers of all times have been most earnest believers in the supernatural; and still more manifest, when we remember that the greatest theologians, like Augustine and Calvin and Edwards and Bishop Butler and Chalmers, have been valiant champions of progress; while Christianity has been the very parent of modern civilization, more industrious in its promotion than any other agent, and more successful than all other agencies, and most successful when most thoroughly imbued with the spirit of Christ, the Master; seeking to-day with sublime zeal and courage and self-denial to extend Christian civilization and Christian progress over all the earth;

desiring at once to plant the school and the church everywhere, at home and abroad; and still more remarkable, when we remember that Christianity, not satisfied with even the present degree of progress, points to the better time coming, when the knowledge of the Lord shall fill the whole earth; bids us as sons of God, "Be strong and of a good courage," "leaving the principles of the doctrine of Christ, go on unto perfection," when, as full inheritors of the truth of God, men shall grow up "unto the measure of the stature of the fulness of Christ," speaking to us evermore of the supreme value of the soul, and stimulating us and the world evermore with the significant words of Jesus: "What shall it profit a man if he shall gain the whole world, and lose his own soul?"

On the other hand, self-styled modern thought with shameful contradiction of its pretensions to progress, goes back to heathen scepticism for its philosophy, revives the defunct notions of Democritus and Leucippus, exalts nature above God, and matter above mind, asserts the descent of man from the monkey; and, as if not satisfied with such debasement, declares that the monkey was once a slimy ascidian, and that the ascidian—the low, but living ascidian—had a spontaneous generation, taking its life from that which was positively and utterly

lifeless ; so that the human soul and body equally are material and alike subject to death and decay ; while “ modern thought ” completes the vicious circle of contradictions by declaring that the future shall be not a progress, but a regress along the receding curve in the cycle of *evolution* and *revolution*. Such is the pretension and such is the mockery of self-styled modern thought. If this be “ advanced thinking,” what, we ask, is the direction ? What a system, we submit, is this to be proud of ! How well it is authorized to despise Christ and Christians, theology and theologians, civilization such as Christianity has produced and perfected, progress such as Christianity promises—illimitable in the opening field of the future, in a purer moral life and a better moral atmosphere and “ a better country, even an heavenly,” saying to each and to all evermore : “ Be ye perfect, even as your Father in heaven is perfect ! ”

These general criticisms are more than verified by a reference to specific results reached by modern thought in regard to science, philosophy, morals, and religion. This reference must, of course, be restricted ; and, it need be the less extended, by reason of the notoriety industriously given to their conclusions by these new schoolmen.

In science, which is their especial boast, they tell us that we can know nothing but phenomena, their

antecedents and sequents. Indeed, this is all we can know of the laws of nature. In fact, this is the law of nature, according to their formal definition,—the invariable succession and resemblance of phenomena (Comte and Lewes and Mill). After all the vaunted talk of laws, their sum is this, and nothing more.

According to “modern thought,” so extremely tenuous and insubstantial a thing is law. And yet we are told by these “advanced thinkers” not only to study the laws of nature, but to study *only* the laws of nature, since this is all we can know. At the same time we are oracularly informed that we ourselves are only a series of feelings and sensations, and that material nature—the universe of worlds—is but the possibility of sensations (See Mr. Mill).

But if “modern thought” makes the realm of knowledge thus phenomenal and fleeting, still more unstable does it make science itself. Even so simple a fact as that $2 + 2 = 4$ they tell us is not fixed, but that at some other time or place $2 + 2$ may make 5, that two lines which are parallel may meet somewhere and at some time, and that effects may happen without any cause. Like the old sceptics, they can not affirm; they can not deny. In this uncertainty of knowledge, which is more tantalizing than ignorance, “modern thought” is driven like a shuttle, between phantasms without and phantasms

within, weaving its own winding-sheet of nescience ; so that Mr. Mill, coolest and steadiest of modern thinkers, as he looks in another direction resolves it all into self-knowledge, and then, as he pauses to look at his theory, denies the knowledge of self and the knowledge of things. Driven by his theory of nescience, he concludes, with the notorious sophists of twenty centuries ago, that nothing is truly known ; and now, driven by the necessity of thought, or as he styles it, "irresistible association," he refers every sensation to mind and matter—the subject and object ; affirming, "I can not be conscious of the sensation, without being conscious of it as related to these two things." *

In his posthumous essay on "Nature," he says : "The nature of a thing means its entire capacity of exhibiting phenomena. Nature means the sum of all phenomena, together with the causes which produce them." Thus, in common with all phenomenologists, he fully recognizes both the principle and the terminology of causation. Yet, driven by his theory in common with all phenomenologists, he repudiates the principle, and emasculates the term "cause" of its meaning : "I do not mean a cause which is not itself a phenomenon." † His logic should have

* Mill's Examination of Hamilton's Philosophy, pp. 214, 215.

† Logic, i. p. 358.

saved him from contradictions. It should, at least, have prevented his false play between the general and the special use of such a term as "cause," and from the convenient fallacy of shifting premises. The teacher of logic should not allow his own practice to illustrate the *ignoratio elenchi*. More than this, if he disregards the claim of consistency, he should respect the claim of honesty; and, in a question so manifestly essential, be careful neither to deceive himself nor to mislead others.

Herbert Spencer, driven by the necessity of thought, asserts that "there can not be appearing without an underlying reality or ground of the appearance, that is unthinkable";*—striving thus to give validity to science; and now, driven by his theory of nescience, asserts that the ultimate ground is unknowable, and thus concludes, with the sophists, that nothing is truly known. His whole scientific superstructure, which seemed so fair and firm, only deceives us by concealing from our view the fathomless abyss of nescience; and as we enter it, seeking scientific repose and security, the false foundation suddenly sinks, precipitating us and all into the frightful vortex of the unknown.

Lewes, who, with his modern definition of truth as the order of ideas corresponding to the order of

* First Principles.

phenomena,* asserts that we know only phenomena, and should therefore study their laws, and would make science at least legitimate,—informs us that law is only invariable succession, having no vital connection nor real power. When asked whether there is an external world or an internal conscious being, he replies that we know only phenomena—that whether there is really anything within or anything without, we know not. Driven by his theory of verification, Lewes would make science legitimate. Driven by his theory of nescience, he would make the internal and the external worlds merely phenomenal, and science itself—however legitimate by hypothesis—invalid in fact; concluding, with the sophists, that nothing is truly known, and even pausing to applaud the sophists in their remarkable conclusion.

A single quotation from Mr. Bain must conclude our illustration of science as presented by these “advanced thinkers.” As if to outdo the old sophists in this direction, and thus establish some apparent claim to originality for “modern thought,” Mr. Bain asserts: “Both as to the reality of matter and as to the reality of spirit, I am incapable of direct knowledge, therefore make no distinction between the knowable and the unknowable.” † Such is the

* History of Philosophy, i. p. 31

† The Senses and the Intellect.

scope, and such the security of science, according to self-styled "modern thought." What can science such as this avail, even if perfected? Is this the boasted progress of our century? Stripped of its disguises, such thought is not even modern. It is not only ancient, but antiquated.

Again, we are reminded of Tyndall's truthful confession: "The logical feebleness of science is not sufficiently understood"; and the more forcibly, when we compare the assertions and admissions of the automatic system so pompously presented by modern materialists, like Maudsley: "The formation of an idea is an organic process. Exquisitely delicate is the mental development which takes place in the minute cells of the cortical layers; yet the mysteries of their secret operations can not be unravelled. Physiology hitherto has been unable to construct a mental science";* and Carl Vogt: "Thought stands in the same relation to the brain as bile to the liver" and Moleschott: "Thought is a motion of matter"; and the irrepressible Büchner: "Mental activity is a function of the cerebral substance"; in contrast with Tyndall's acknowledgment that "the molecular groupings and molecular motion of the materialists explain nothing. The problem of the connec-

* Physiology and Pathology of Mind.

tion of soul and body is as insoluble in its modern form as it was in the pre-scientific ages."

Mr. Huxley, who significantly points to materialism as threatening the extinction of spirit, and sneeringly refers to the public solicitude in regard to the question as no more dignified or reasonable than the vulgar lamentation at the death of Pan, feels compelled to vindicate his own reputation by saying: "I am no materialist. On the contrary, I believe materialism to involve grave philosophical error."

"Modern thought," in its phase of materialism, makes mind, like heat, a mode of motion, and thought the result of molecular changes; and in the phase of nescience, finally reduces science to the knowledge not of things, but of relations, and these not even the relations of things, but the relations of fleeting appearances,—of mere phenomena—scientifically and seriously this, and nothing more.

But if "modern thought" is so faulty and false toward true science, it is, as we should expect, fatal to true philosophy,—philosophy as knowledge of things in their causes. Indeed, Comte magisterially ruled out philosophy from his system, as irrelevant to knowledge and impossible. Lewes, in his elegiac history of its repeated, but fruitless struggles, reports philosophy a failure—the study of causes vain and illusory.

Mill, who "positively" condescends to examine the philosophy of Sir William Hamilton, repudiates all consciousness of being, or knowledge of causes, and, with endless iteration, repeats: "All our knowledge is only of phenomena; of things and causes we can know nothing."

Mr. Spencer, not content with mere phenomena, seeks forever for something real; but, having extinguished from his system the light of reason, in his blindness postulates despairingly in the unknown what he longs to find, but forever fails, and leaves philosophy confounded in the limitless chaos of the unknowable. If positive science is merely of the phenomenal, not of the real, positive philosophy, at the most, can be no more than this,—the science ultimately of the unknown and unknowable. Thus does the nescience of "modern thought" summon the scientific crusade against theology and metaphysics and philosophy, against the being of God and of mind and of matter. In this war of extermination it would at last slay knowledge itself. The great defect in the experiential philosophy is the chasm between mind and matter. Whatever the persistency of the analysis, mind remains conscious, matter remains unconscious.

It is especially noticeable to what contradictions these philosophical repudiators are driven. Now, in

their theory, they repudiate *a priori* principles and processes. And now, driven by the necessity of thought, Spencer rests on a "fundamental verity," and postulates a force unknowable, as persistent, and as a ground of all phenomena. Mill, driven by "irresistible association," refers all phenomena to matter and mind—to the "me" and the "not-me"—the subject and the object. And Lewes is driven to admit that "the fundamental ideas of modern science are as transcendental as any of the axioms in ancient philosophy." * These principles, this science (their science of the phenomenal) will not, can not give. No generalization of phenomena can give the knowledge of being, especially to those who scientifically deny the possibility of all knowledge of things as existing; no generalization of effects can give the knowledge of cause, especially to those who scientifically deny all possible knowledge of things and causes, and who thus ignore and rule out philosophy as illicit and illusory.

How do these "advanced thinkers" treat morality?

Mr. Buckle says: "Every new fact is the necessary product of antecedent fact, and both providence and free-will are a delusion. Physical laws take the place of personal agency. Historic actors, therefore,

* Philosophy of Aristotle, p. 66.

are automatons." In this personal statement, Mr. Buckle indicates the general drift of "modern thought" in regard to morals.

Mr. Mill, in reviewing Comte's theory approvingly, says: "The transition is steadily proceeding from the theological mode of thought to the positive, which is destined finally to prevail by the universal recognition that all phenomena, without exception, are governed by invariable laws, with which no volitions, either natural or supernatural, interfere." Mill would subject even the Creator and Governor to necessity, and restrict him to arbitrary arrangements, permitting no belief even to recognize his existence, unless he obey fixed laws, which are never to be modified or counteracted by the personal preference of the Creator.* Thus does "modern thought" repudiate responsibility, and reject moral freedom, and inculcate the pernicious theory of automatic action on earth and in heaven.

Mr. Mill introduces his view of punishment by this startling preamble: "Though a man can not help acting as he does, his character being what it is," and much more to the same effect. "His own good, either physical or moral, is no warrant for compelling him" to do otherwise. "The most we

* Mill's *Philosophy of Comte*, p. 16.

should think ourselves justified in doing is leaving him to himself" *

And yet, whether influenced by force of thought or by force of feeling we need not conjecture, Mr. Mill, with strange forgetfulness, falls into gross inconsistency: He has made up his mind, if the First Cause be an *immoral* God, he will defy him to do his worst, and will not worship him. †

But we reply, how can the First Cause, according to Mr. Mill's theory, possibly be immoral or moral? As a necessary and necessitated cause he can have no moral character; or, if you please, he must be un-moral (i. e. not moral). But suppose Mr. Mill will not worship such a God? The carping philosopher must obey, as the effect (according to his system of necessity) must obey its cause. What if the defiant philosopher *must*, even if he will not, worship the tyrant? Such talk, from a philosophic necessitarian is mere bravado. In spite of his theory excluding all possible morality, Mr. Mill freely employed the terms "morality" and "morals," "moral results" and "moral causes;" admitted the prevalent conviction of choice or moral freedom both before and after voluntary action; and asserted that this conviction

* See Mill's Essay on Liberty; although this is rather a vindication of necessity or denial of any possible morality or accountability.

† See Mill's Examination of Sir William Hamilton's Philosophy, p. 103.

could only be acquired by experience. The admission proves too much for the necessitarian—proves the undoing of his theory. The conviction *is* acquired. The freedom has been exercised. Moral freedom is vindicated by experience, as well as by universal conviction. Therefore Mr. Mill is held to the logical consequence of moral responsibility and moral government. Hence we argue to the moral character and moral government of God.

Comte, at first, excluded religion from his system, or referred to it not as moral or spiritual, but merely as intellectual—the product of the understanding striving to explain the phenomena of nature, rather than of reason and conscience recognizing moral obligation and seeking communion with a living, personal God. The two conceptions differ utterly in regard to the source, the character, and the sphere of religion. Both can not be true. One must be right to the exclusion of the other. According to Comte's conception, natural history, as intellectual,—the product of the understanding seeking to explain the phenomena of nature—would be the height of religion; though it involved not the least moral choice, nor the slightest moral feeling, nor any recognition of God.

But at length intense reaction completely reversed the religious attitude of Comte, and from his earlier

exclusion of religion he proceeded to elaborate the "religion of humanity," which the Catéchism Positivist since 1852, has made more familiar to the public, perhaps more repugnant.

In his review of Comte's system, Mr. Mill expressly declares: "Comte's religion is without a God";* and lest the reviewer be suspected of condemning it as such, he remarks approvingly: "We venture to think that a religion may exist without belief in a God," and be at once "instructive and profitable." Mr. Mill will, indeed, allow one to believe or disbelieve in a God, and yet have religion. Nothing could more clearly indicate his complete indifference to religion, and the utter emptiness of his religious conception. And yet for this careless permission to believe in a God he is severely criticised and condemned by Littré, a disciple and successor of Comte. The religious theory of Mr. Spencer is at least as liberal as that of Mr. Mill. From his system he rules out the possible recognition of a personal God, and allows nothing but an inscrutable power, while he makes this startling statement: "The atheistic, the pantheistic, and the theistic hypotheses contain the same element—an absolute mystery."† Thus modern positivism presents a religion without a God, but proposes "a new

* Mill's "Examination," etc. p. 120.

† First Principles, p. 36.

Supreme Being," the "Grand Être," that is, Collective Humanity—"a God not yet formed," but "to be forming of new component parts"; "the dead to occupy the first place, then those who are yet to be born." Madame Clotilde de Vaux—like Comte himself released by divorce from the marriage bond—becomes his "angelic interlocutrix" in elaborating the new religion. With the establishment of this religion the Christian calendar is to be superseded by a scientific calendar. The temples are to be turned toward Paris—the Mecca of "modern thought." Jehovah is to give place to a new goddess, the goddess of Collective Humanity. Thrice, daily, shall men pray, everywhere, to deified woman. Worship, dogmas, discipline, architecture, altars, priesthood, symbolism, gestures, sacraments,—all the details are minutely given in the ritual of positive religion, even to directions for closing and opening the eyes, in this worship of woman. Madame Clotilde—or whatever woman—is to be exalted over him whose name is above every name; and "soon the knee of man will never bend, except to woman." The deification of mortals according to Comte, or the worship of the unknowable according to Spencer, or blank materialism excluding all worship and all religion, is offered to us by modern

thought to supersede the Christian religion and the worship of the ever-living and true God.

Mr. Spencer feels the need of conciliation, not of conflict, between science and religion, and points to a common ground, which both may harmoniously occupy. Comte, the Corypheus of positivism, whom Lewes devoutly hails as a scientific apostle, and proclaims as a leader not only for himself, but for such impatient followers as Mill and Huxley and Spencer—Comte, suffering the horrors of divorce between science and religion, penitently besought a reconciliation, and strove to effect a union between his emasculated system and a religion if not wholly earth-born, at least not divine. Even Strauss, after forty years of Titanic struggle to scale the heavens and dethrone the old faith, repented of his folly, and turned beseechingly toward a new faith, to which he sought to win his vacillating disciples. Mill, left alone with his philosophy, became a devotee at the grave of departed love. The school of nescients worship an unknown God ; while the more advanced of the advanced thinkers, who have pushed their analysis to its scientific limit, and have found the primal being—the source of all phenomena—return with synthetic fervor, crying “Aha ! we have found a God !” and reverently place a fetich upon the altar of science ; and, with worship “for the most

part of the silent sort," bow the knee to force,—blind, unconscious, unintelligent, unknowable force. Mr. Spencer, we repeat, feels the need not of conflict but of conciliation, between science and religion, as did Bacon and Locke, and Newton and Descartes, and Galileo and Copernicus, and Tully and Plato and Socrates, and, as we believe, most men who have been capable of profound thought, earnestly feel. How can this be made not only possible, but permanent?

We have already described the threefold presentation of knowledge to the mind by the sense, by the understanding, by the reason. Now science, however restricted, need not, can not, legitimately conflict with religion. If science be theoretically confined within the narrow limit of sense, as it is by many, it can not oppose, it can at most only stand self-silenced in the presence of religion. Its strongest assertion can only be, it does not know. Its comprehensive objection must be its own ignorance. In the pathway of religion experimental science has come thus far; because of self-imposed limits it can go no farther. By no means, however, can it legitimately forbid religion to advance.

If science be enlarged to the field of the understanding, as is its right and its duty, logical deductions from ten thousand thousand indications confirm the claim of religion, and follow far in the pathway

of her advance ; and if pausing at any time, it is not with disbelief but with prompt admission that the course however long, is right, and with an earnest good-speed to religion along the brightening way in which it would fain accompany her.

But if science advance to the province of the reason, which is its chief right and duty, it beholds not only things seen and temporal through the intuitions of sense, but the things unseen and eternal through the intuitions of reason. Reason looks out upon space, and reports it limitless ; upon time, and reports it endless ; surveys the realm of phenomena, and reports of every effect—as does the sense, so far as it can feel or hear or see,—reports that every effect has a cause, and more, that every effect must have a cause ; and applies this rule with unqualified assurance to every positive effect in space, and to every positive effect in time ; and, as certainly, that every effect must have an adequate cause, e. g. that while the weight of fifty pounds requires a power sufficient to raise it, a weight of one hundred pounds requires twice that power to raise it ; and that variation of cause is required for variation of effect, not only in degree, but also in kind. Moral effects require moral causes ; for there can be no morality without mental choice, and no responsibility without rational freedom. By the same intui-

tion of reason, it is a positive knowledge that an intelligent effect must have an intelligent cause. Every design put forth into effect must have a designer. The author of all things must be adequate to what is. Who shall dare deny that these intuitions of reason reported to the human mind and carefully arrayed in classified knowledge—who shall deny that this is science? Shall he, especially, who in the same breath asserts that intuitions of sense reported to the mind and then classified constitute science?

Intuitively to the individual mind, and with authority, reason presents this as most rational. Not only has the common consciousness of the world confirmed this affirmation of reason, but natural religion rests in confidence upon this rational support. In this higher and surer realm of science, religion may best expatiate and feel most at home. With no fanatical frenzy and no superstitious devotion, but in the calm and cheerful light of rational beholding, religion and reason have thus accompanied each other sympathetically and harmoniously. On the way have the physical senses failed? Has the eye grown dim? the ear dull and heavy? Religion has pressed forward; for she walks not by physical sight. Have tongues ceased? Has the understanding completed its deductions from what has been

seen and heard and felt of sensible things, and paused in its prophecies? Religion has pressed forward; for something there is in the human soul that has never failed it,—the presence and the support of reason.

But is there no end? no beginning? Are reason and religion doomed forever to tread the unsatisfying pathway of development, never to find what is, only to meet what is becoming—the phenomenal, the transitory? Is there no comprehension to the field of rational science? While the field of sense is comprehended, and the field of the understanding is comprehended, is there no comprehension to the field of rational science? Reason itself comprehends this field by a right as complete, at least, as does the sense or the understanding comprehend its field. And reason evermore affirms not only that phenomena come and go in endless succession and variety, but that something is—eternal. Though phenomena pass by and vanish, this remaineth; although all else should wax old and be changed, yet this shall remain the same, and never fail. This ultimate ground not only has Spencer reached in the pathway of rational science, which he would harmonize with religion; but the same ultimate ground Paul has reached in the pathway of religion, which he promptly harmonizes with reason. So far

forth, there has been no conflict between science and religion.

Religion would find in this eternal source of all things adequate cause for every effect, in one word, eternal power and Godhead, in which it may confide, on which it may rely, with which it may commune. Does reason reject as irrational the declaration of an old and familiar, but by no means dishonored writer, whom we have just mentioned, who, in a remarkable letter to the Romans, says: "The invisible things of *him* from the creation of the world are clearly seen, being understood by the things that are made"; and in another letter, no less remarkable, addressed to the Hebrews, says: "*Thou* remainest, and *thou* art forever the same!" Does it not, rather, devoutly accept and confirm this statement?

If an issue is raised, it is at this point: Shall mind be secondary and subordinate to matter? This is the real issue. One or the other is original and dominant. We shall be pardoned for adverting to it, for it is the real issue presented and pressed by "modern thought." Mr. Spencer postulates an ultimate force, persistent, unconscious, unintelligent, physical force. This, then, he assumes is original and dominant—the source of all that is. Mind, therefore, according to Spencer, is secondary and subordinate to matter.

Tyndall looks "across the boundary of experimental evidence," beyond which, according to the experimental system of "modern thought," he has no right to look, "and discerns in matter the promise and the potency of every form and quality of life." Mind, then, according to Tyndall, is secondary and subordinate to matter. And yet Tyndall is compelled to say that all true men of science "will frankly admit their inability to point to any satisfactory, experimental proof that life can be developed save from demonstrable antecedent life."

Avowed materialists, with whom Spencer and Tyndall are unwilling to be classed — avowed materialists assume that matter is primary and all-prevalent. Hence mind, if there is any, is secondary and subordinate to matter; in its final analysis, is indeed material.

Now, we do not for a moment stop to speak of blank materialism, which precludes the existence of mind by reducing it and all things to matter, and thus contradicts our fundamental belief, the universal distinctions of language, and the common consciousness of mankind. To avowed materialists, who assume that mind itself is material, this issue must be utterly irrelevant and impossible. The issue with them is upon entirely another ground. Science itself is impossible, where mind is ruled out

as material ; for matter can know nothing, *a fortiori* it can not construct science.

But to advance to the narrowest field of science,—that of sense, the experiential—we affirm that those who confine themselves within this narrow field are by self-limitation excluded from this discussion. The problem does not, at least, lie within that field. The issue is not a phenomenon, for the eye or ear or touch to decide. If there is no science but this possible, as some scientists pretend, then the problem is ruled out forever, and the issue must be pronounced nugatory. But the issue does not await the permission of positivism. It spurns such scientific impertinence. Ruled out forever as nugatory and impossible, it returns with ten thousand thousand voices to assert its real presence, and confront and contradict the partial ruling. If this restricted tribunal is incompetent to do it justice and secure its rights, it is but a confession of the incompetency of positivism. There is an appeal to a court of larger jurisdiction and higher competency. We make no special plea against the modern school of science. We point to its confession as conclusive proof of weakness. Within its own field it is doing industrious and legitimate service to religion and progress. But it is not comprehensive, therefore it must not be exclusive. It may be positive in regard to its

knowledge ; it should be positive, also in regard to its ignorance. On other and essential grounds we have already shown its fatal defect. Its confession here confirms our criticism. The issue is not only between religion and partial science, but also between partial science and true philosophy.

We repeat, the real issue remains. It will not down at the bidding of positive science. It has the life of humanity, and the vigor of faith reappearing in every form of religion since the world began. Shall mind be secondary and subordinate to matter? Or is mind itself superior and primary—the source of all that is, and the sovereign? We say to positivism, as we say to every sense-theory, it is incompetent to assert ; it is incompetent to deny. All it can say is, that there are antecedents and sequents, phenomena succeeding phenomena ; but it can not affirm, it certainly can not deny, that there is anything abiding. Hence we dismiss objections from any such quarter, as unauthorized and groundless. But there is a larger field of science,—the field of the understanding, where true logic has its legitimate sphere, and conclusions may be valid, e.g., that there can not be phenomena without something to appear, nor effects without something to produce them. And so Mr. Tyndall admits that all phenomena have a causative source in the potency of matter ; although he does

not tell us what matter is, nor whence or what is its potency. Till these questions be answered, he has thrown but a dim and unsatisfactory light upon the problem. Yet Tyndall disclaims atheism—a disclaimer certainly significant in regard to the real question at issue.

Mr. Spencer, with greater boldness, tells us that force is the ground of all phenomena, and that force is unknowable. This is the farthest analysis of “modern thought.”

And this is proposed as the common ground of reconciliation between science and religion. Is science, whose very office is to know—is science satisfied with this proposed reconciliation in the unknowable? Can it consent to a postulate which is suicidal—an ultimate which would swallow up every scientific labor and success in fathomless nescience?

Can religion accept this theory as sufficient to satisfy the longing of the human soul—a longing not only to rely upon, but to trust in and commune with, the Eternal Being—not only to fear, but to worship and love, the Eternal? In this final question, important above all others, does ratiocination repudiate or confirm faith? Does reason still accompany and support religion? Can science give us any knowledge of force which will help decide the

case? In our own consciousness does force appear as the offspring of mind, the result of will-power and not *vice versa*? Is not Mr. Spencer's notion of force derived from mind? "Force, as known to us, is an affection of consciousness." * "The force by which we ourselves produce changes serves to symbolize the cause of changes in general, and is the final disclosure of analysis." † Is, then, his final analysis final, when he postulates force as ultimate? Or does it look directly beyond, to the will-power or personality which exerts that force? Is not his final analysis, then, really an indication and admission of a *personal* First Cause as Author of force, and thus Creator of the universe? Religion does not discard the reconciliation proposed by Mr. Spencer because it is too scientific, but because it is too little scientific. Religion admits the right of science to go thus far, whether Mr. Spencer's system would authorize it to do so or not. But religion denies the right to go thus far, and then stop at this point.

Faith raises the same question in behalf of religion which reason asks in behalf of science: Why stop with force as the ground of all phenomena, when force itself is phenomenal as meeting and resisting the senses, e. g., in hearing, touch, etc.? Why stop with force, when force itself, according to our

* First Principles, p. 58.

† Ibid. p. 235.

consciousness, testifies of will as its source? Why call it unknown, when in the same breath it is declared known, as having persistence and power and causality, etc.—attributes which belong to personality? Why call it unintelligent, when confessedly its doings are the most intelligent (according to “modern thought”) in the universe; comprehending, indeed, by the theory, all the intelligence in the universe? Why call it unconscious, when it manifests not only the highest intelligence, but the highest wisdom in the adaptation of means to ends, in relating causes to effects, in harmonizing forces and phenomena throughout the universe? so that science itself asserts the universal order; and science and religion agree in tracing all phenomena and all effects to one ultimate cause. Why call this ultimate and eternal cause force,—blind, unconscious, unintelligent force,—and thus exclude God from the universe, and deny his existence, when “modern thought” itself involuntarily admits that such effects as have been produced demand the highest type of causation?*

Why call it unknown, when in the same breath it is declared persistent, and so known as enduring? when it is declared “the ultimate of ultimates,” and so known as the ground of all appearances, “the cause of all phenomena,” the ultimate or first cause?

* See Tyndall's Address.

If science can know so much about this "unknowable" as to clothe it with attributes of personality, why not frankly admit, as some of the most candid and able scientific thinkers affirm, and as faith will admit and our consciousness asserts, that force is the product of will-power, and so the primal or ultimate force is the product of an eternal, almighty, intelligent, and wise will,—the infinite and holy will of a personal God?

This may be common ground for science and religion. Thus is the First Cause not only ultimate, but adequate to the production of mental, as well as material, phenomena—adequate, which according to Mr. Spencer's theory it confessedly is not. Thus all things centre harmoniously in God. Mind as a free, personal activity is his offspring; and force, though unseen, is his material creation—the product of his will—the ground of all material phenomena. So that, in the higher light of rational science, as well as in the clear vision of faith, God appears as the Author of all things, and reason confirms the affirmation of faith, that "The worlds were framed by the word of God; so that things which are seen were not made of things which do appear."

Thus both by the authority of reason and of faith is the universe wrested from the false and fearful dominion of fate, and the capricious and still

more fearful dominion of chance. Moral government is restored to the world. Not only power, but wisdom and goodness, belong unto God. Henceforth, forever, science, as well as religion, may rest by faith in God. He is our dwelling-place in all generations; the universe is secure under his almighty and everlasting and holy government. Neither necessity nor chance shall wreck or crush it. The field of science securely opens into the alluring and widening future. Newton was, indeed, as a child gathering pebbles on the shore of the boundless ocean of knowledge. Bacon was but the trumpeter to sound the inspiring call in the triumphant march of thought; while faith surveys the expanding fields of science and the bright and interminable field of religion, and with rapture recalls the promise of God: "All are yours."

Here we find the clue to a true theory of evolution, which runs throughout all material nature, and inductively and securely leads us back to force, and up to God as the Creator of force and the Author of nature—an evolution originated by a divine mind, controlled by divine power, guided by divine wisdom, and consummated by divine benevolence.

On the other hand, this clue saves us from wandering in the endless mazes of the false theory of evolution presented by "modern thought," based

upon the false theory of force as ultimate. Besides this fundamental defect, this theory of evolution declares force to be absolute, yet becoming conditioned ; to be homogeneous, yet becoming heterogeneous—the one evolving into the many, not only, and the multifarious, but into the contradictory and superior, in endless succession. How, we ask, can evolution start with the homogeneous,—force, and force only,—without spontaneity or will? How, then, can the homogeneous become unstable and heterogeneous, and force become forces? It is impossible, according to the system ; and evolution can not begin. It is only by an illicit process that Spencer's system can change the homogeneous into the heterogeneous,—by surreptitiously introducing motion. If force is first, and at first is all, how is it that it evolves so as to produce consciousness and self-consciousness ; so as to produce knowledge,—knowledge of itself, and knowledge of all things, amounting even to omniscience ?

By Spencer's "positive" legerdemain not only does his unknown and unknowable make itself familiar to mortals in these new and curious forms, as blind force playing fantastic tricks that rival the capricious antics of the Grecian Pan ; but more than this, the unknown and the unknowable, grown familiar in the skillful hands of Mr. Spencer, outrivals

Pan, who indeed became all things, but by hypothesis was himself all things. Mr. Spencer's blind force evolves into more than it was, and what it was not. This ultimate force in itself unconscious, makes itself conscious by whirling; in itself unintelligent, makes itself intelligent, by whirling and whirling; without wisdom or purpose in itself, it makes itself the centre of all wisdom and the perfection of all purpose by fortuitous whirling and whirling; in itself merely physical, at a single bound it leaps into the metaphysical. Material, blind, and unseeing, at a bound it evolves into the mental; at another bound it evolves into the rational; by continued evolution the blind, unconscious, physical force evolves into mind,—rational, moral, spiritual—until in a maze of wonder, the multitude cry out: "It is a God"; and the high-priests of positivism, with reverential recognition, standing aloof from the wondering crowd, bow down, "for the most part in worship of the silent sort." Such is the wonder-working of "modern thought." In phenomenal theorizing, verily, nothing serves so well as a skillful prestidigitator.

If force be declared ultimate,—force persistent, unconscious, unintelligent—then matter must be primary and superior, and evolution must be unoriginated and uncontrolled by a divine mind, subject

to blind fate or capricious chance. Either horn of the dilemma would prove fatal. With chance supreme, science were impossible; with fate supreme, moral freedom and moral government were impossible.

If mind is declared ultimate,—mind infinite, eternal,—then mind is primary and superior; then evolution is originated and controlled by divine wisdom and power, and nature's laws are at the same time efficient and uniform; efficient, because sustained by divine authority; and, although variable according to the divine behest, yet uniform because of the divine faithfulness, which "is unto all generations."

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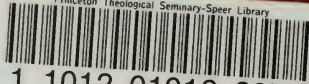
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